

Specification No. _____

**SPECIFICATIONS
FOR
NEVADA, IA – SRF SPONSORED PROJECT
WEST INDIAN CREEK (PROJECT A)
NEVADA, IA
2025**


**HR Green, Inc.
Project No. 191900**

OWNERSHIP OF DOCUMENT

This document, and the ideas and designs incorporated herein, as an instrument of professional service, is the property of HR Green, Inc. and is not to be used, in whole or in part, for any other project without the written authorization of HR Green, Inc.

HR Green, Inc.
Project No. 191900

WEST INDIAN CREEK (PROJECT A)
SRF SPONSORED PROJECT
CITY OF NEVADA, IOWA

	<p>I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.</p>
	<p style="text-align: right;">Date: _____</p> <p>KATE R. BARNES, P.E., CFM</p> <p>License No. 26428</p> <p>My renewal date is December 31, 2025.</p> <p>Pages or sheets covered by this seal:</p> <p>_____</p> <p>_____</p>

**SPECIFICATIONS
FOR
NEVADA, IA – SRF SPONSORED PROJECT
WEST INDIAN CREEK (PROJECT A)
NEVADA, IOWA**

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**NOTICE OF PUBLIC HEARING ON PROPOSED
PLANS AND SPECIFICATIONS, FORM OF CONTRACT AND ESTIMATE OF COST FOR THE
NEVADA, IA – SRF SPONSORED PROJECT
WEST INDIAN CREEK (PROJECT A)
NEVADA, IA**

Notice is Hereby Given: That at 6:00 PM, at the City Hall, Council Chambers, 1209 6th Street, Nevada, IA 50201 on April 14, 2025 the City Council of Nevada, IA (The “City”) will hold a public hearing on the proposed plans and specifications, form of contract and estimate of cost (the “Contract Documents”) for the proposed Nevada, IA – SRF Sponsored Project West Indian Creek (the “Project”).

The Project shall consist of:

Measures to stabilize and restore West Indian Creek including rock placement, grading, removal of trees, and vegetation seeding and establishment.

The Project is located along West Indian Creek, south of Lincoln Highway, starting at approximately 42.022451, -93.465634 and ending at approximately 42.017557, -93.459983.

A copy of the proposed Contract Documents is on file for public inspection in the office of the City Clerk.

At said hearing any interested person may file written objections or present oral comments with respect to the subject matter of the hearing.

Kerin Wright
City Clerk

HR Green, Inc.
Project No. 191900

WEST INDIAN CREEK (PROJECT A)
SRF SPONSORED PROJECT
CITY OF NEVADA, IOWA

**NOTICE TO BIDDERS
NEVADA, IA – SRF SPONSORED PROJECT
WEST INDIAN CREEK (PROJECT A)
NEVADA, IA**

Time and Place for Filing Sealed Proposals. Sealed bids for the work comprising the improvement as stated below must be filed before 9:00 AM on March 31, 2025 in the office of the City Clerk, City Hall, 1209 6th Street, Nevada, IA 50201.

Time and Place Sealed Proposals Will be Opened and Considered. Sealed proposals will be opened and bids tabulated at 9:00 AM on March 31, 2025 in the office of the City Clerk, 1209 6th Street, Nevada, IA 50201 for consideration by the City Council of Nevada, IA at its meeting on April 14, 2025 at 6:00 PM in the City Hall, Council Chambers, 1209 6th Street, Nevada, IA 50201. The City of Nevada reserves the right to reject any and all bids.

The City of Nevada, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

Time for Commencement and Completion of Work. Work on the improvement shall commence within 10 days of the date specified on the Notice to Proceed. Notice to Proceed shall be no later than 10 days after the execution of the agreement, work shall be substantially completed by August 31, 2025 and work shall be fully completed on or before May 30, 2026. Damages in the amount of \$500 per day will be assessed for each day the work remains incomplete.

Bid Security. Each bidder shall accompany its bid with bid security, as defined in Section 26.8 of the Iowa Code in an amount equal to 5% percent of the total amount of the bid.

Contract Documents. Copies of the Plans and Specifications for this project may be obtained from HR Green, Inc., by e-mail request to kate.barnes@hrgreen.com. Plans and Specifications are available at no cost

Public Hearing on Proposed Contract Documents and Estimated Costs for Improvement. A public hearing will be held by the City Council of Nevada, IA on the proposed contract documents (plans, specifications and form of contract) and estimated cost for the improvement at its meeting at 6:00 PM on April 14, 2025 in the City Hall, Council Chambers, 1209 6th Street, Nevada, IA 50201.

Preference of Products and Labor. Preference shall be given to domestic construction materials by the contractor, subcontractors, material, men, and suppliers in performance of the contract and, further, by virtue of statutory authority, preference will be given to products and provisions grown and coal produced within the State of Iowa, and to Iowa domestic labor, to the extent lawfully required under Iowa statutes.

Sales Tax Exemption Certificates. The bidder shall not include sales tax in the bid. The City of Nevada will distribute tax exemption certificates and authorization letters to the Contractor and all subcontractors who are identified. The Contractor and subcontractor may make copies of the tax exemption certificates and provide a copy to each supplier providing construction materials. These tax exemption certificates and

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SRF SPONSORED PROJECT
CITY OF NEVADA, IOWA

authorization letters are applicable only for this specific project under the Contract.

General Nature of Public Improvement. Measures to stabilize and restore West Indian Creek including rock placement, grading, removal of trees, and vegetation seeding and establishment.

This Notice is given by authority of the City of Nevada

Kerin Wright, City Clerk
Nevada, IA

**INSTRUCTIONS TO BIDDERS
NEVADA, IA – SRF SPONSORED PROJECT
WEST INDIAN CREEK (PROJECT A)
NEVADA, IA**

The work comprising the above referenced project shall be constructed in accordance with the latest Edition of the SUDAS Standard Specifications Manual. The terms used in the contract version of the documents are defined in said Standard Specifications. Before submitting your bid, please review the requirements of Division One, General Provisions and Covenants. Please be certain that all documents have been completed properly, as failure to complete and sign all documents and to comply with the requirements listed below can cause your bid not to be read.

I. BID SECURITY

- A. The bid security must be in the minimum amount of 10 percent of the total bid amount including all add alternates (do not deduct the amount of deduct alternates). Bid security shall be in the form of a cashier's check, a certified check, or a bank money order drawn on a FDIC insured bank in Iowa or drawn on a FDIC insured bank chartered under the laws of the United States; or a certified share draft drawn on a credit union in Iowa or chartered under the laws of the United States; or a bid bond executed by a corporation authorized to contract as a surety in Iowa or satisfactory to the Jurisdiction.
- B. The bid bond must be submitted on the SUDAS Bid Bond form as no other bid bond forms are acceptable. All signatures on the bid bond must be original signatures in ink; facsimile (fax) of any signature on the bid bond is not acceptable.
- C. Bid security other than said bid bond shall be in accordance with Chapter 26 of the Iowa Code.

II. SUBMISSION OF THE PROPOSAL AND IDENTITY OF BIDDER

- A. The proposal shall be sealed in an envelope, properly identified as the Proposal with the project title and the name and address of the bidder, and deposited with the Jurisdiction at or before the time and at the place provided in the Notice to Bidders. It is the sole responsibility of the bidder to see that its proposal is delivered to the Jurisdiction prior to the time for opening bids, along with the appropriate bid security sealed in the separate envelope identified as Bid Security and attached to the outside of the bid proposal envelope. Any proposal received after the scheduled time for the receiving of proposals will be returned to the bidder unopened and will not be considered.
- B. The Bidder Status Form is required by the Iowa Labor Commissioner, pursuant to Iowa Administrative Code rule 875-156.2(1). The bidder must complete the form and submit it with the proposal. Failure to provide the Bidder Status Form with the bid may result in the bid being deemed non-responsive and may result in the bid being rejected. If the bidder does not qualify as a resident bidder, the nonresident bidder shall specify on the Bidder Status Form whether any preference to resident bidders, including but not limited to any preference to bidders, the imposition of any type of labor force preference, or any other form of preferential treatment to bidders or laborers from that state or foreign country is in effect in the nonresident bidder's state or country of domicile at the time of a bid submittal. Application of the preference against a non-

resident bidder shall be in accordance with the information filed with the Proposal on the Bidder Status Form.

C. The following documents shall be completed, signed and returned in the Proposal envelope. The bid cannot be read if any of these documents are omitted from the Proposal envelope.

1. PROPOSAL – Complete each of the following parts:

- Part B – Acknowledgment of Addenda, if any have been issued;
- Part C – Bid Items, Quantities and Prices;
- Part F – Additional Requirements;
- Part G – Identity of Bidder;

The following documents which are proposal attachments must be completed and attached:

ITEM NO.	DESCRIPTION OF ATTACHMENT
-----------------	----------------------------------

- | | |
|----|--|
| 1. | Bidder Status Form and Worksheet: Authorization to Transact Business |
| 2. | Section 00430 – Bid Bond (Submitted in Separate Sealed Envelope) |
| 3. | SRF Attachments 1, 2, & 5 |

Sign the proposal; and have the signature notarized. The signature on the proposal and all proposal attachments must be an original signature in ink signed by the same individual who is the Company Owner or an authorized Officer of the Company; copies or facsimile of any signature will not be accepted.

The following documents must be submitted as printed. No alterations, additions, or deletions are permitted. If the Bidder notes a requirement in the contract documents which the Bidder believes will require a conditioned or unsolicited alternate bid, the Bidder must immediately notify the Jurisdictional Engineer in writing. The Jurisdictional Engineer will issue any necessary interpretation by an addendum.

**PROPOSAL
NEVADA, IA – SRF SPONSORED PROJECT
WEST INDIAN CREEK (PROJECT A)
NEVADA, IA**

PROPOSAL: PART A – SCOPE

The City of Nevada, IA, hereinafter called the “Jurisdiction”, has need of a qualified contractor to complete the work comprising the below referenced improvement. The undersigned Bidder hereby proposes to complete the work comprising the below referenced improvement as specified in the contract documents, which are officially on file with the Jurisdiction, in the office of the City Clerk at the prices hereinafter provided in Part C of the Proposal, for the following described improvements:

Measures to stabilize and restore West Indian Creek including rock placement, grading, removal of trees, and vegetation seeding and establishment.

PROPOSAL: PART B – ACKNOWLEDGMENT OF ADDENDA

The Bidder hereby acknowledges that all addenda become a part of the contract documents when issued, and that each such addendum has been received and utilized in the preparation of this bid. The Bidder hereby acknowledges receipt of the following addenda by inserting the number of each addendum in the blanks below and certifies that said addenda were utilized in the preparation of this bid.

ADDENDUM NUMBER _____ ADDENDUM NUMBER _____

ADDENDUM NUMBER _____ ADDENDUM NUMBER _____

PROPOSAL: PART C – BID ITEMS, QUANTITIES AND PRICES

UNIT BID PRICE CONTRACTS: The Bidder must provide the Unit Bid Price, the Total Bid Price, any Alternate Prices and the Total Construction Costs on the Proposal Attachment: Part C – Bid Items, Quantities, and Prices. In case of discrepancy, the Unit Bid Price governs. The quantities shown on the Proposal Attachment: Part C – Bid Items, Quantities and Prices are approximate only, but are considered sufficiently adequate for the purpose of comparing bids. The Jurisdiction shall only use the Total Construction Cost for comparison of the bids. The Total Construction Cost, including any Add-Alternates shall be used for determining the sufficiency of the bid security.

BASE BID CONTRACTS: The bidder must provide any Bid Prices, and alternate Prices, and the Total of the Base Bid plus any Add-alternates on the Proposal Attachment: Part C-Bid Items, Quantities, and the Prices. The Jurisdiction shall only use the Total Construction Cost for comparison of the bids. The Total Construction Cost, including any Add-Alternates shall be used for determining the sufficiency of the bid security.

PROPOSAL: PART D – GENERAL

The Bidder hereby acknowledges that the Jurisdiction, in advertising for bids for this project reserves the right to:

1. Reject any or all bids. Award of the contract, if any, to be to the lowest responsible, responsive bidder; and
2. Reject any or all alternates in determining the items to be included in the contract. Designation of the lowest responsible, responsive bidder to be based on the comparison of the total bid only, not including any alternates; and
3. Make such alterations in the documents or in the proposal quantities as it determines necessary in accordance with the contract documents after execution of the contract. Such alterations shall not be considered a waiver of any conditions of the contract documents, and shall not invalidate any of the provisions thereof; and

The Bidder hereby agrees to:

1. Enter into a contract, if this proposal is selected, in the form approved by the Jurisdiction, provide proof of registration with the Iowa Division of Labor in accordance with Chapter 91C of the Iowa Code, and furnish a performance, maintenance, and payment bond; and
2. Forfeit bid security, not as a penalty but as liquidated damages, upon failure to enter into such contract and/or furnish said bond; and
3. Commence the work on this project within 10 days of the date specified on the Notice to Proceed; and
4. Substantially Complete the project on or before August 31, 2025
5. Fully complete the project on or before May 30, 2026.
6. Pay liquidated damages for noncompliance with said completion provisions at the rate of \$500 for each calendar day thereafter the work remains incomplete.

PROPOSAL: PART E – NON-COLLUSION AFFIDAVIT

The Bidder hereby certifies:

1. That this proposal is not affected by, contingent on, or dependent on any other proposal submitted for any improvement with the Jurisdiction; and
2. That no individual employed by the Bidder has employed any person to solicit or procure the work on this project, nor will any employee of the Bidder make any payment or agreement for payment of any compensation in connection with the procurement of this project; and
3. That no part of the bid price received by the Bidder was or will be paid to any person, corporation, firm, association, or other organization for soliciting the bid, other than the payment of their normal compensation to persons regularly employed by the Bidder whose services in connection with the construction of the project were in the regular course of their duties for the Bidder; and
4. That this proposal is genuine and not collusive or sham; that the Bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any bidder or person, to submit a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly, sought,

by agreement or collusion, or communication or conference, with any person, to fix the bid price of the Bidder or of any other bidder, and that all statements in this proposal are true; and

- 5. That the individual(s) executing this proposal have the authority to execute this proposal on behalf of the Bidder.

PROPOSAL: PART F – ADDITIONAL REQUIREMENTS

The Bidder hereby agrees to comply with the additional requirements listed below which are included in this proposal and identified as proposal attachments:

ITEM NO.	DESCRIPTION OF ATTACHMENT
1.	Bidder Status Form and Worksheet: Authorization to Transact Business
2.	Section 00430 – Bid Bond (Submitted in Separate Sealed Envelope)
3.	SRF Attachments 1, 2, & 5

PROPOSAL: PART G – IDENTITY OF BIDDER

The Bidder shall indicate whether the bid is Submitted by a/an:

<input type="checkbox"/>	Individual, Sole Proprietorship	_____	Bidder
<input type="checkbox"/>	Partnership	_____	Signature
<input type="checkbox"/>	Corporation	_____	Name (Print/Type)
<input type="checkbox"/>	Joint-venture: all parties must join-in and execute all documents	By _____	Title
<input type="checkbox"/>	Other	_____	Street Address
		_____	City, State, Zip Code
		_____	Telephone Number

The Bidder shall enter its Public Registration Number _____ - _____ issued By the Iowa Commissioner of Labor Pursuant Section 91C.5 of the Iowa Code.

NOTE: The signature on this proposal must be an original signature in ink; copies or facsimile of any signature will not be accepted.

Subscribed and sworn to before me this _____ day of _____, 20 _____.

HR Green, Inc.
Project No. 191900

WEST INDIAN CREEK (PROJECT A)
SRF SPONSORED PROJECT
CITY OF NEVADA, IOWA

Notary Public in and for

State of _____

County of _____

My commission expires _____

**PROPOSAL
NEVADA, IA – SRF SPONSORED PROJECT
WEST INDIAN CREEK (PROJECT A)
NEVADA, IOWA**

PROPOSAL ATTACHMENT: PART C – BID ITEMS, QUANTITIES AND PRICES

This is a UNIT BID PRICE CONTRACT. The bidder must provide the Unit Bid Price, the Total Bid Price, and the Total Construction Cost; in case of discrepancy, the Unit Bid Price governs. The quantities shown on the Proposal Attachment: Part C – Bid Items, Quantities and Prices are approximately only, but are considered sufficiently adequate for the purpose of comparing bids. The Jurisdiction shall only use the Total Construction Cost for comparison of bids.

ITEM NO.	BID ITEM	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	TEMPORARY TRAFFIC CONTROL	1	LS		
2	CLEAR AND GRUBBING	1	LS		
3	TOPSOIL, ONSITE, 6 INCH DEPTH (STRIP, SALVAGE, AND RESPREAD)	4,306	CY		
4	EXCAVATION, CLASS 10 HAUL OFF-SITE	350	CY		
5	EXCAVATION, CLASS 10 RESPREAD ON-SITE	3,423	CY		
6	EXCAVATION, CLASS 10 REUSE ON-SITE	8,715	CY		
7	REMOVAL OF SHARED USE PATH	60	SY		
8	SHARED USE PATH REPLACEMENT, MATCH EXISTING HMA	60	SY		
9	PERMANENT CONVENTIONAL SEEDING, FERTILIZING, AND MULCH (SUDAS TYPE 1)	0.3	AC		
10	TEMPORARY HYDRAULIC SEEDING AND MBFM (SUDAS TYPE 4)	5.3	AC		
11	PERMANENT HYDRAULIC SEEDING, FERTILIZING, AND MBFM (SUDAS NATIVE GRASSES)	5	AC		
12	WARRANTY, 3 YEAR ESTABLISHMENT AND MAINTENANCE	1	LS		
13	SWPPP PREPARATION	1	LS		
14	SWPPP MANAGEMENT	1	LS		
15	RECP, TYPE 3B, NATURAL FIBER ONLY	15,300	SY		
16	WATTLE, NATURAL FIBER ONLY, 9-INCH DIAMETER	8,700	LF		
17	WATTLE, REMOVAL	8,700	LF		
18	RIP RAP, CLASS B (RIFFLES)	44	TON		

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 CITY OF NEVADA, IOWA

19	RIP RAP, CLASS E (RIFFLES, OUTFALL PROTECTION, AND TOE ROCK)	4,468	TON		
20	STABILIZED CONSTRUCTION ENTRANCE	367	SY		
21	REMOVAL OF EXISTING CROSSING STRUCTURE	1	EA		
22	MOBILIZATION	1	LS		
23	CONSTRUCTION SURVEY	1	LS		

TOTAL _____

NOTE: IT IS UNDERSTOOD THAT THE ABOVE QUANTITIES ARE ESTIMATED FOR THE PURPOSE OF THIS BID. ALL QUANTITIES ARE SUBJECT TO REVISION BY THE CITY. QUANTITY CHANGES WHICH AMOUNT TO TWENTY (20) PERCENT OR LESS OF THE TOTAL BID SHALL NOT AFFECT THE UNIT PRICE BID.

 Bidder

HR Green, Inc.
Project No. 191900

WEST INDIAN CREEK (PROJECT A)
SRF SPONSORED PROJECT
CITY OF NEVADA, IOWA

**BID BOND
NEVADA, IA – SRF SPONSORED PROJECT
WEST INDIAN CREEK (PROJECT A)
NEVADA, IOWA**

KNOW ALL BY THESE PRESENTS:

That we, _____, as Principal, and _____, as Surety, are held and firmly bound unto Nevada, IA, as Obligee, (hereinafter referred to as “the Jurisdiction”), in the penal sum of _____ dollars (\$_____), lawful money of the United States, for which payment said Principal and Surety bind themselves, their heirs, executors, administrators, successors, and assigns jointly and severally, firmly by these presents.

The condition of the above obligation is such that whereas the Principal has submitted to the Jurisdiction a certain proposal, in a separate envelope, and hereby made a part hereof, to enter into a contract in writing, for the following described improvements;

Measures to stabilize and restore West Indian Creek including rock placement, grading, removal of trees, and vegetation seeding and establishment.

The Surety hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Jurisdiction may accept such bid or execute such Contract; and said Surety does hereby waive notice of any such extension.

In the event that any actions or proceedings are initiated with respect to this Bond, the parties agree that the venue thereof shall be Story County, State of Iowa. If legal action is required by the Jurisdiction against the Surety or Principal to enforce the provisions of the bond or to collect the monetary obligation incurring to the benefit of the Jurisdiction, the Surety or Principal agrees to pay the Jurisdiction all damages, costs, and attorney fees incurred by enforcing any of the provisions of this Bond. All rights, powers, and remedies of the Jurisdiction hereunder shall be cumulative and not alternative and shall be in addition to all rights, powers and remedies given to the Jurisdiction, by law. The Jurisdiction may proceed against Surety for any amount guaranteed hereunder whether action is brought against Principal or whether Principal is joined in any such action or actions or not.

NOW, THEREFORE, if said proposal by the Principal be accepted, and the Principal shall enter into a contract with Jurisdiction in accordance with the terms of such proposal, including the provision of insurance and of a bond as may be specified in the contract documents, with good and sufficient surety for the faithful performance of such contract, for the prompt payment of labor and material furnished in the prosecution thereof, and for the maintenance of said improvements as may be required therein, then this obligation shall become null and void; otherwise, the Principal shall pay to the Jurisdiction the full amount of the bid bond, together with court costs, attorney’s fees, and any other expense of recovery.

HR Green, Inc.
Project No. 191900

WEST INDIAN CREEK (PROJECT A)
SRF SPONSORED PROJECT
CITY OF NEVADA, IOWA

Signed and sealed this _____ day of _____, 20_____.

SURETY:

PRINCIPAL:

By _____
Surety Company

Signature Attorney-in-Fact/Officer

Name of Attorney-in-Fact/Officer

Company Name

Company Address

City, State, Zip Code

Company Telephone Number

By _____
Bidder

Signature

Name (Print/Type)

Title

Address

City, State, Zip Code

Telephone Number

NOTE: All signatures on this bid bond must be original signatures in ink; copies or facsimile of any signature will not be accepted. This bond must be sealed with the Surety's raised, embossing seal. The Certificate or Power of Attorney accompanying this bond must be valid on its face and sealed with the Surety's raised, embossing seal.

Bidder Status Form

To be completed by all bidders

Part A

Please answer "Yes" or "No" for each of the following:

- Yes No My company is authorized to transact business in Iowa.
(To help you determine if your company is authorized, please review the worksheet on the next page).
- Yes No My company has an office to transact business in Iowa.
- Yes No My company's office in Iowa is suitable for more than receiving mail, telephone calls, and e-mail.
- Yes No My company has been conducting business in Iowa for at least 3 years prior to the first request for bids on this project.
- Yes No My company is not a subsidiary of another business entity or my company is a subsidiary of another business entity that would qualify as a resident bidder in Iowa.

If you answered "Yes" for each question above, your company qualifies as a resident bidder. Please complete Parts B and D of this form.

If you answered "No" to one or more questions above, your company is a nonresident bidder. Please complete Parts C and D of this form.

To be completed by resident bidders

Part B

My company has maintained offices in Iowa during the past 3 years at the following addresses:

Dates: ____/____/____ to ____/____/____ Address: _____

City, State, Zip: _____

Dates: ____/____/____ to ____/____/____ Address: _____

City, State, Zip: _____

Dates: ____/____/____ to ____/____/____ Address: _____

You may attach additional sheet(s) if needed. City, State, Zip: _____

To be completed by non-resident bidders

Part C

1. Name of home state or foreign country reported to the Iowa Secretary of State:

2. Does your company's home state or foreign country offer preferences to resident bidders, resident labor force preferences or any other type of preference to bidders or laborers? Yes No

3. If you answered "Yes" to question 2, identify each preference offered by your company's home state or foreign country and the appropriate legal citation.

You may attach additional sheet(s) if needed.

To be completed by all bidders

Part D

I certify that the statements made on this document are true and complete to the best of my knowledge and I know that my failure to provide accurate and truthful information may be a reason to reject my bid.

Firm Name: _____

Signature: _____ Date: _____

You must submit the completed form to the governmental body requesting bids per 875 Iowa Administrative Code Chapter 156. This form has been approved by the Iowa Labor Commissioner.

Worksheet: Authorization to Transact Business

This worksheet may be used to help complete Part A of the Resident Bidder Status form. If at least one of the following describes your business, you are authorized to transact business in Iowa.

- Yes No My business is currently registered as a contractor with the Iowa Division of Labor.
- Yes No My business is a sole proprietorship and I am an Iowa resident for Iowa income tax purposes.
- Yes No My business is a general partnership or joint venture. More than 50 percent of the general partners or joint venture parties are residents of Iowa for Iowa income tax purposes.
- Yes No My business is an active corporation with the Iowa Secretary of State and has paid all fees required by the Secretary of State, has filed its most recent biennial report, and has not filed articles of dissolution.
- Yes No My business is a corporation whose articles of incorporation are filed in a state other than Iowa, the corporation has received a certificate of authority from the Iowa secretary of state, has filed its most recent biennial report with the secretary of state, and has neither received a certificate of withdrawal from the secretary of state nor had its authority revoked.
- Yes No My business is a limited liability partnership which has filed a statement of qualification in this state and the statement has not been canceled.
- Yes No My business is a limited liability partnership which has filed a statement of qualification in a state other than Iowa, has filed a statement of foreign qualification in Iowa and a statement of cancellation has not been filed.
- Yes No My business is a limited partnership or limited liability limited partnership which has filed a certificate of limited partnership in this state, and has not filed a statement of termination.
- Yes No My business is a limited partnership or a limited liability limited partnership whose certificate of limited partnership is filed in a state other than Iowa, the limited partnership or limited liability limited partnership has received notification from the Iowa secretary of state that the application for certificate of authority has been approved and no notice of cancellation has been filed by the limited partnership or the limited liability limited partnership.
- Yes No My business is a limited liability company whose certificate of organization is filed in Iowa and has not filed a statement of termination.
- Yes No My business is a limited liability company whose certificate of organization is filed in a state other than Iowa, has received a certificate of authority to transact business in Iowa and the certificate has not been revoked or canceled.

**CONTRACT
NEVADA, IA – SRF SPONSORED PROJECT
WEST INDIAN CREEK (PROJECT A)
NEVADA, IOWA**

THIS CONTRACT, made and entered into this _____ day of _____, 2025, by and between the City of Nevada by its City Administrator, upon order of its City Council hereinafter called the "Jurisdiction", and «Contractor», hereinafter called the "Contractor".

WITNESSETH:

The Contractor hereby agrees to complete the work comprising the below referenced improvement as specified in the contract documents, which are officially on file with the Jurisdiction, in the office of the City Clerk. This contract includes all contract documents. The work under this contract shall be constructed in accordance with the latest Edition of the Urban Standard Specifications for Public Improvements, as further modified by the supplemental specifications and special provisions included in said contract documents, and the Contract Attachment, which is attached hereto. The Contractor further agrees to complete the work in strict accordance with said contract documents, and guarantee the work as required by law, for the time required in said contract documents, after its acceptance by the Jurisdiction. The owner of the project shall review change orders, if the change order is deemed necessary and the City approves, only then can it be implemented. If change orders are implemented prior to the approval of the owner, the full responsibility and cost lies with the contractor.

This contract is awarded and executed for completion of the work specified in the contract documents for the bid prices shown on the Contract Attachment: Bid Items, Quantities and Prices which were proposed by the Contractor in its proposal submitted in accordance with Notice to Bidders and Notice of Public Hearing for the following described improvements:

Measures to stabilize and restore West Indian Creek including rock placement, grading, removal of trees, and vegetation seeding and establishment.

The Contractor agrees to perform said work for and in consideration of the Jurisdiction's payment of the bid amount of TBD dollars, which amount shall constitute the required amount of the performance, maintenance, and payment bond. The Contractor hereby agrees to commence work under this contract within 10 days of the date specified on the Notice to Proceed, work shall be substantially complete on or before August 31, 2025, and shall be fully completed on or before May 30, 2026, and to pay liquidated damages for noncompliance with said completion provisions at a rate of 500 dollars for each calendar day that the work remains incomplete.

HR Green, Inc.
Project No. 191900

WEST INDIAN CREEK (PROJECT A)
SRF SPONSORED PROJECT
CITY OF NEVADA, IOWA

IN WITNESS WHEREOF, the Parties hereto have executed this instrument, in triplicate on the date first shown written.

JURISDICTION: Nevada, IA

CONTRACTOR:

By _____
Jordan Cook, City Administrator

TBD

(Seal)
ATTEST:

By _____
TBD, TBD

Kerin Wright, City Clerk

Print Name, Title

Street Address

City, State, Zip Code

Telephone

CONTRACTOR PUBLIC REGISTRATION INFORMATION To Be Provided By:

1. All Contractors: The Contractor shall enter its Public Registration No. _____ issued by the Iowa Commissioner of Labor pursuant to Section 91C.5 of the Iowa Code.
2. Out-of-State Contractors:
 - A. Pursuant to Section 91C.7 of the Iowa Code, an out-of-state contractor, before commencing a contract in excess of five thousand dollars in value in Iowa, shall file a bond with the division of labor services of the department of workforce development. The contractor should contact 515-242-5871 for further information. Prior to contract execution, the Engineer may forward a copy of this contract to the Iowa Department of Workforce Development as notification of pending construction work. It is the contractor's responsibility to comply with said Section 91C.7 before commencing this work.
 - B. Prior to entering into contract, the designated low bidder, if it be a corporation organized under the laws of a state other than Iowa, shall file with the Jurisdictional Engineer a certificate from the Secretary of the State of Iowa showing that it has complied with all the provisions of Chapter 490 of the Code of Iowa, or as amended, governing foreign corporations. For further information contact the Iowa Secretary of State Office at 515-281-5204.

Bond No. _____
Name of Surety _____

NOTE: All signatures on this contract must be original signatures in ink; copies or facsimile of any signature will not be accepted.

HR Green, Inc.
Project No. 191900

WEST INDIAN CREEK (PROJECT A)
SRF SPONSORED PROJECT
CITY OF NEVADA, IOWA

CORPORATE ACKNOWLEDGMENT

State of _____)
_____) SS
_____ County)

On this _____ day of _____, 20____, before me, the undersigned, a Notary Public in and for the State of _____, personally appeared _____ and _____, to me known, who, being by me duly sworn, did say that they are the _____, and _____, respectively, of the corporation executing the foregoing instrument; that (no seal has been procured by) (the seal affixed thereto is the seal of) the corporation; that said instrument was signed (and sealed) on behalf of the corporation by authority of this Board of Directors; that _____ and _____ acknowledged the execution of the instrument to be the voluntary act and deed of the corporation, by it and by them voluntarily executed.

Notary Public in and for the State of _____
My commission expires _____, 20 _____

CONTRACT ATTACHMENT: ITEM 1: GENERAL - None

CONTRACT ATTACHMENT: ITEM 2: BID ITEMS, QUANTITIES

THIS CONTRACT IS AWARDED AND EXECUTED FOR COMPLETION OF THE WORK SPECIFIED IN THE CONTRACT DOCUMENTS FOR THE BID PRICES TABULATED BELOW AS PROPOSED BY THE CONTRACTOR IN ITS PROPOSAL SUBMITTED IN ACCORDANCE WITH NOTICE TO BIDDERS AND NOTICE OF PUBLIC HEARING. ALL QUANTITIES ARE SUBJECT TO REVISION BY THE JURISDICTION. BASED ON BIDS RECEIVED, THE CITY RESERVES THE RIGHT TO ADJUST QUANTITIES AS NECESSARY TO MAXIMIZE FUNDS BUDGETED FOR THIS PROJECT.

ITEM NO.	BID ITEM	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	TEMPORARY TRAFFIC CONTROL	1	LS		
2	CLEAR AND GRUBBING	1	LS		
3	TOPSOIL, ONSITE, 6 INCH DEPTH (STRIP, SALVAGE, AND RESPREAD)	4,306	CY		
4	EXCAVATION, CLASS 10 HAUL OFF-SITE	350	CY		
5	EXCAVATION, CLASS 10 RESPREAD ON-SITE	3,423	CY		
6	EXCAVATION, CLASS 10 REUSE ON-SITE	8,715	CY		
7	REMOVAL OF SHARED USE PATH	60	SY		
8	SHARED USE PATH REPLACEMENT, MATCH EXISTING HMA	60	SY		
9	PERMANENT CONVENTIONAL SEEDING, FERTILIZING, AND MULCH (SUDAS TYPE 1)	0.3	AC		
10	TEMPORARY HYDRAULIC SEEDING AND MBFM (SUDAS TYPE 4)	5.3	AC		
11	PERMANENT HYDRAULIC SEEDING, FERTILIZING, AND MBFM (SUDAS NATIVE GRASSES)	5	AC		
12	WARRANTY, 3 YEAR ESTABLISHMENT AND MAINTENANCE	1	LS		
13	SWPPP PREPARATION	1	LS		
14	SWPPP MANAGEMENT	1	LS		
15	RECP, TYPE 3B, NATURAL FIBER ONLY	15,300	SY		
16	WATTLE, NATURAL FIBER ONLY, 9-INCH DIAMETER	8,700	LF		
17	WATTLE, REMOVAL	8,700	LF		
18	RIP RAP, CLASS B (RIFFLES)	44	TON		
19	RIP RAP, CLASS E (RIFFLES, OUTFALL PROTECTION, AND TOE ROCK)	4,468	TON		
20	STABILIZED CONSTRUCTION ENTRANCE	367	SY		
21	REMOVAL OF EXISTING CROSSING STRUCTURE	1	EA		
22	MOBILIZATION	1	LS		
23	CONSTRUCTION SURVEY	1	LS		

TOTAL _____

**PERFORMANCE, PAYMENT AND MAINTENANCE BOND
NEVADA, IA – SRF SPONSORED PROJECT
WEST INDIAN CREEK (PROJECT A)
NEVADA, IOWA**

KNOW ALL BY THESE PRESENTS:

That we, TBD as Principal (hereinafter the “Contractor” or “Principal” and _____, as Surety are held and firmly bound unto the The City of Nevada, as Obligee (hereinafter referred to as “the Jurisdiction”), and to all persons who may be injured by any breach of any of the conditions of this Bond in the penal sum of «WrittenContractAmount» Dollars(\$TBD) lawful money of the United States, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, legal representatives and assigns, jointly or severally, firmly by these presents.

The conditions of the above obligations are such that whereas said Contractor entered into a contract with the Jurisdiction, bearing date the _____ day of _____, 2025, (hereinafter the “Contract”) wherein said Contractor undertakes and agrees to construct the following described improvements:

Measures to stabilize and restore West Indian Creek including rock placement, grading, removal of trees, and vegetation seeding and establishment.

and to faithfully perform all the terms and requirements of said Contract within the time therein specified, in a good and workmanlike manner, and in accordance with the Contract Documents. Provided, however, that one year after the date of acceptance as complete of the work under the above referenced Contract, the maintenance portion of this Bond shall continue in force but the penal sum for maintenance shall be reduced to the sum of \$_____ (enter amount of contract or value of work that requires maintenance bond in excess of one year) which is the cost associated with those items shown on the proposal and in the Contract which require a maintenance bond period in excess of one year.

It is expressly understood and agreed by the Contractor and Surety in this bond that the following provisions are a part of this Bond and are binding upon said Contractor and Surety, to-wit:

1. **PERFORMANCE:** The Contractor shall well and faithfully observe, perform, fulfill and abide by each and every covenant, condition and part of said Contract and Contract Documents, by reference made a part hereof, for the above referenced improvements, and shall indemnify and save harmless the Jurisdiction from all outlay and expense incurred by the Jurisdiction by reason of the Contractor’s default of failure to perform as required. The Contractor shall also be responsible for the default or failure to perform as required under the Contract and Contract Documents by all its subcontractors, suppliers, agents, or employees furnishing materials or providing labor in the performance of the Contract.

2. **PAYMENT:** The Contractor and the Surety on this Bond are hereby agreed to pay all just claims submitted by persons, firms, subcontractors, and corporations furnishing materials for or performing labor in the performance of the Contract on account of which this Bond is given, including but not limited to claims for all amounts due for labor, materials, lubricants, oil, gasoline, repairs on machinery, equipment and tools, consumed or used by the Contractor or any subcontractor, wherein the same are not satisfied out of the portion of the contract price which the Jurisdiction is required to retain until completion of the improvement, but the Contractor and Surety shall not be liable to said persons, firms, or corporations unless the claims of said claimants against said portion of the contract price shall have been established as provided by law. The Contractor and Surety hereby bind themselves to the obligations and conditions set forth in Chapter 573, Code of Iowa, which by this reference is made a part hereof as though fully set out herein.
3. **MAINTENANCE:** The Contractor and the Surety on this Bond hereby agree, at their own expense:
 - A. To remedy any and all defects that may develop in or result from work to be performed under the Contract within the period of 3 year(s) from the date of acceptance of the work under the Contract, by reason of defects in workmanship or materials used in construction of said work;
 - B. To keep all work in continuous good repair.
 - C. To pay the Jurisdiction's reasonable costs of monitoring and inspection to assure that any defects are remedied, and to repay the Jurisdiction all outlay and expense incurred as a result of Contractor's and Surety's failure to remedy any defect as required by this section; and
 - D. Contractor's and Surety's agreement herein made extends to defects in workmanship or materials not discovered or known to the Jurisdiction at the time such work was accepted.
4. **GENERAL:** The Contractor and every Surety on this Bond shall be deemed and held bound, any contract to the contrary notwithstanding, to the following provisions:
 - A. To consent without notice to any extension of time to the Contractor in which to perform the Contract;
 - B. To consent without notice to any change in the Contract or Contract Documents, which thereby increases the total contract price and the penal sum of this bond, provided that all such changes do not, in the aggregate, involve an increase of more than twenty percent of the total contract price, and that this bond shall then be released as to such excess increase; and
 - C. To consent without notice that this Bond shall remain in full force and effect until the Contract is completed, whether completed within the specified contract period, within an extension thereof, or within a period of time after the contract period has elapsed and the liquidated damage penalty is being charged against the Contractor.
 - D. That no provision of this Bond or of any other contract shall be valid which limits to less than five years after the acceptance of the work under the Contract the right to sue on this Bond.
 - E. That as used herein, the phrase "all outlay and expense" is not to be limited in any way, but shall include the actual and reasonable costs and expenses incurred by the Jurisdiction including interest, benefits and overhead where applicable. Accordingly, "all outlay and expense" would include but not be limited to all contract or employee expense, all equipment usage or rental, materials, testing, outside experts, attorneys fees (including overhead expenses of the

Jurisdiction's staff attorneys), and all costs and expenses of litigation as they are incurred by the Jurisdiction. It is intended the Contractor and Surety will defend and indemnify the Jurisdiction on all claims made against the Jurisdiction on account of Contractor's failure to perform as required in the Contract and Contract Documents, that all agreements and promises set forth in the Contract and Contract Documents, in approved change orders, and in this Bond will be fulfilled, and that the Jurisdiction will be fully indemnified so that it will be put into the position it would have been in had the Contract been performed in the first instance as required.

In the event the Jurisdiction incurs any "outlay and expense" in defending itself with respect to any claim as to which the Contractor or Surety should have provided the defense, or in the enforcement of the promises given by the Contractor in the Contract, Contract Documents, or approved change orders, or in the enforcement of the promises given by the Contractor and Surety in this Bond, the Contractor and Surety agree that they will make the Jurisdiction whole for all such outlay and expense, provided that the Surety's obligation under this bond shall not exceed 125% of the penal sum of this bond.

In the event that any actions or proceedings are initiated with respect to this Bond, the parties agree that the venue thereof shall be Story, State of Iowa. If legal action is required by the Jurisdiction to enforce the provisions of this Bond or to collect the monetary obligation incurring to the benefit of the Jurisdiction, the Contractor and the Surety agree, jointly and severally, to pay the Jurisdiction all outlay and expense incurred therefor by the Jurisdiction. All rights, powers, and remedies of the Jurisdiction hereunder shall be cumulative and not alternative and shall be in addition to Surety for any amount guaranteed hereunder whether action is brought against the Contractor or whether Contractor is joined in any such action or actions or not.

NOW THEREFORE, the condition of this obligation is such that if said Principal shall faithfully perform all the promises of the Principal, as set forth and provided in the Contract, in the Contract Documents, and in this Bond, then this obligation shall be null and void, otherwise it shall remain in full force and effect.

When a word, term, or phrase is used in this Bond, it shall be interpreted or construed first as defined in this Bond, the Contract, or the Contract Documents; second, if not defined in the Bond, Contract, or Contract Documents, it shall be interpreted or construed as defined in applicable provisions of the Iowa Code; third, if not defined in the Iowa Code, it shall be interpreted or construed according to its generally accepted meaning in the construction industry; and fourth, if it has no generally accepted meaning in the construction industry, it shall be interpreted or construed according to its common or customary usage.

Failure to specify or particularize shall not exclude terms or provisions not mentioned and shall not limit liability hereunder. The Contract and Contract Documents are hereby made a part of this Bond.

HR Green, Inc.
Project No. 191900

WEST INDIAN CREEK (PROJECT A)
SRF SPONSORED PROJECT
CITY OF NEVADA, IOWA

Witness our hands, in triplicate, this _____ day of _____, 20____.

Surety Countersigned By:

PRINCIPAL:

Name of Resident Commission Agent

Contractor

Company Name

By: _____
Signature

Company Address

Printed Name, Title

City, State, Zip Code

SURETY:

Company Telephone Number

Surety Company

By: _____
Signature Attorney-in-Fact Officer

Name of Attorney-in-Fact Officer

Company Name

Company Address

City, State, Zip Code

Company Telephone Number

NOTE: All signatures on this performance, maintenance & payment bond must be original signatures in ink; copies or facsimile of any signature will not be accepted. This bond must be sealed with the Surety's raised, embossing seal. The Certificate or Power of Attorney accompanying this bond must be valid on its face and sealed with the Surety's raised, embossing seal.

**SPECIAL PROVISIONS
NEVADA, IA – SRF SPONSORED PROJECT
WEST INDIAN CREEK (PROJECT A)
NEVADA, IOWA**

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1. FORM OF SPECIFICATIONS

- 1.1. "Specifications" shall mean the latest Edition of the SUDAS Standard Specifications.
- 1.2. Omissions of words or phrases such as "the Contractor shall", "in accordance with", "shall be", "as noted on the Plans", "according to the Plans", "a", "an", "the" and "all" are intentional; supply omitted words or phrases by inference.
- 1.3. "Owner", and "City" shall mean the City of Nevada, IA, acting through the City Council.
- 1.4. "Person" shall mean any individual, partnership, limited partnership, joint venture, society, association, joint stock company, corporation, limited liability company, estate, receiver, trustee, assignee, or referee, whether appointed by a court or otherwise, and any combination of individuals.
- 1.5. "Engineer" shall mean the Engineer for the City of Nevada or designated agent.
- 1.6. "Standard Drawings" shall mean the Figures bound within the SUDAS Standard Specifications and/or the Typical Drawings bound within the plans.
- 1.7. "Work" shall mean the work to be done and the equipment, supplies, and materials to be furnished under the contract unless some other meaning is indicated by the context.
- 1.8. "Or equal" shall follow manufacturers names used to establish standards and, if not stated, is implied.
- 1.9. "Punch List" list of incomplete items of Work and of items of Work which are not in conformance with the Contract. The list will be prepared by the Engineer's representative when the Contractor (1) notifies the Engineer's representative in writing that the Work has been completed in accordance with the contract and (2) requests in writing that the Owner accept the Work.

- 1.10. "Substantial Completion" in addition to the definition provided in the General Conditions, the following applies: Sufficient completion of the project or the portion thereof to permit utilization of the project, or portion thereof for its intended purpose. Substantial completion requires not only that the work be sufficiently completed to permit utilization, but that the Owner can effectively utilize the substantially completed Work. Determination of substantial completion is solely at the discretion of the Owner. Substantial completion does not mean complete in accordance with the Contract nor shall substantial completion of all or any part of the project entitle the Contractor to acceptance under the Contract.
- 1.11. "Final Completion" when the Engineer deems the Project and Punch List fully complete in accordance with Plans and Specification, and when all items including but not limiting to: excess building materials, concrete forms, construction trailers, field offices, and temporary traffic control have been removed from site, the Engineer shall notify the Owner in writing and recommend final acceptance of work. Sales and Use Tax Forms and Lien Waivers do not have to be completed but are encouraged to be completed as a condition of Final Completion. The date of final completion shall be the date the Engineer's written recommendation of final acceptance to the Owner.

2. GENERAL PROVISIONS AND COVENANTS

- 2.1. The general provisions and covenants, Division 1 of the SUDAS Standard Specifications are modified as follows:
 - 2.1.1. Section 1020.1.09.B, Unit Price Attachment.

A computer generated unit price attachment may be submitted by the Bidder as specified by this Section.
 - 2.1.2. Section 1050.1.05 Shop Drawings, Certificates and Equipment Lists.

The Contractor shall submit a minimum of three (3) copies plus any additional required by the Contractor.
 - 2.1.3. Railroad Protection

Liability insurance and permits.
None.

3. PLANS AND SPECIFICATIONS

- 3.1. Engineer will furnish up to five (5) sets of Plans and Specifications after award of contract. Contractor shall compensate Engineer for printing costs for additional copies required.
- 3.2. Subcontractors and suppliers will be furnished copies of Plans and Specifications only at request of Contractor. Engineer will be compensated for printing costs by Contractor.

4. SERVICE FACILITIES

- 4.1. The Contractor will be required to make arrangements for all services required during the construction period and pay for such services at no additional cost to the Owner.

5. MINOR WORK

- 5.1. Any minor work not specifically mentioned in the Specifications as shown on the Plans but obviously necessary for the proper completion of the work shall be considered as being a part of and included in the contract and shall be executed in the proper manner and the Contractor shall not be entitled to extra or additional compensation for the same.

6. WORKING DAYS/COMMUNITY ACTIVITIES

- 6.1. Except for such work as may be required to properly maintain lights and barricades, no work will be permitted on Sundays or legal holidays without specific permission of the Engineer.
- 6.2. The following Community Events are scheduled, Contractor is required to coordinate with Owner as needed to allow use of adjacent public property.
 - 6.2.1. None

7. CONSTRUCTION FACILITIES BY CONTRACTOR

- 7.1. Provide telephone, attended at all times during the working day; provide liaison between telephone and construction personnel for expeditious handling of messages.
- 7.2. Provide suitable storage buildings necessary for proper storage of materials and equipment.
- 7.3. Location of all construction facilities, including Project construction plant and yard, subject to approval by Engineer; remove all construction facilities upon completion of work.
- 7.4. Provide and maintain suitable sanitary facilities for construction personnel for duration of work; remove upon completion of work.
- 7.5. Provide fences, barricades, and/or watch persons to prevent access of unauthorized persons to site where work is in progress.
- 7.6. Provide telephone number(s) at which responsible representatives of Contractor can be reached evenings, weekends and holidays.

8. SOIL BORINGS

- 8.1. See attached report.

9. CONSTRUCTION ON HIGHWAY RIGHT-OF-WAYS

- 9.1. All work on this project will be within City Right-of-Way, Easements or Public Property.

10. EMPLOYMENT PRACTICES

- 10.1. Neither the Contractor nor the contractor's Subcontractors shall employ any person whose physical or mental condition is such that this employment will endanger the health and safety of anyone employed on the Project.
- 10.2. The Contractor shall not commit any of the following employment practices and agrees to include the following clauses in any Subcontracts:
 - 10.2.1. To discharge from employment or refuse to hire any individual because of sex,

race, color, religion, national origin, sexual orientation, marital status, age, or disability unless such disability is related to job performance of such person or employee.

- 10.2.2. To discriminate against any individual in terms, conditions, or privileges of employment because of sex, race, color, religion, national origin, sexual orientation, marital status, age, or disability unless such disability is related to job performance of such person or employee.

11. WORK HOURS

- 11.1. The Contractor will be required to limit the Contractor's work hours on the Project from 7:00 a.m. to 7:00 p.m., Monday through Saturday unless otherwise directed by the Engineer.

12. DUST ABATEMENT

- 12.1. The Contractor shall make a reasonable effort to assure dust does not become a problem. The Engineer reserves the right to stop Contractor's operations whenever dust becomes a problem on the Project and direct the Contractor to revise operations to solve the dust problem.

13. QUANTITIES

- 13.1. The Contractor is to realize some of the quantities on this Project are best estimates and may vary from actual conditions at time of construction of the Project. Quantities must be regarded as approximate only, and are given as a guide to the Bidder and for comparison of Bids. The City reserves the right to increase or decrease these quantities as designated in the contract, and the Contractor will be paid for only as much work as the Contractor is required to do by the City at the unit price stated in the Proposal.

14. MAINTENANCE BOND AND WARRANTY PERIODS **Specifier note: Verify with Owner Warranty requirements**

- 14.1. The requirements of the Payment, Performance and Maintenance Bond warranty period are modified as follows:
- 14.1.1 3 year(s) warranty and maintenance bond required for the work, except sodding.

15. CONSTRUCTION STAKING

- 15.1. The Contractor shall provide all construction staking. Contractor shall be responsible for layout of all other construction items including but not limited to, traffic control, structure removal, pavement markings, seeding, inlet filters and silt fence. One-time staking shall be provided. Any re-staking shall be paid for by the Contractor.
- 15.2. Construction staking provided by the Contractor on the project shall include the following:
- 15.2.1. Horizontal and Vertical Control
- Locate and maintain all horizontal control points and vertical benchmarks as listed on the plan sheets that may be destroyed by the planned construction.
- 15.2.2. Removal Limits

Locate removals for pavement, sidewalks, drives, structure. Removals not authorized or outside of removal limits shall be at Contractor expense.

15.2.3. Storm Sewer and Culverts

Set grade offset stakes for intake and manhole structures at the location station for each type of structure.

Set grade offset for pipe runs at 50 foot interval.

16. PRECONSTRUCTION MEETING

- 16.1. Engineer will schedule a meeting after Notice of Award.
 - 16.1.1. Attendance Required:
 - 16.1.2. Owner
 - 16.1.3. Engineer
 - 16.1.4. Contractor
 - 16.1.5. Contractor's Superintendent
 - 16.1.6. Major Subcontractors
 - 16.1.7. Utility Companies
- 16.2. Agenda:
 - 16.2.1. Submission of list of Subcontractors, list of Products, schedule of values, and progress schedule.
 - 16.2.2. List and schedule of submittals/shop drawings.
 - 16.2.3. Designation of personnel representing the parties in Contract and the Engineer.
 - 16.2.4. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 - 16.2.5. Use of premises by Owner and Contractor.
 - 16.2.6. Owner's requirements.
 - 16.2.7. Facilities and controls provided by Owner.
 - 16.2.8. Temporary utilities provided by Owner.
 - 16.2.9. Security and housekeeping procedures.
 - 16.2.10. Scheduling
 - 16.2.11. Procedures for testing
 - 16.2.12. Procedures for maintaining record documents
 - 16.2.13. Project Schedule
- 16.3. Engineer shall record minutes and distribute copies within two days after meeting to participants, with copies to Contractor, Owner, participants, and those affected by

decisions made.

17. PROGRESS MEETINGS

- 17.1. Contractor to schedule and administer meetings throughout progress of the Work at maximum monthly intervals or as established at preconstruction meeting.
- 17.2. Contractor to make arrangements for meetings, prepare agenda with copies for participants, preside at meetings, record minutes, and distribute copies within two days to Engineer, Owner, participants, and those affected by decisions made.
- 17.3. Attendance Required: Job superintendent, major Subcontractors and suppliers, Owner, Engineer, as appropriate to agenda topics for each meeting.
- 17.4. Agenda:
 - 17.4.1. Review minutes of previous meetings.
 - 17.4.2. Address public concerns and complaints.
 - 17.4.3. Review of Work progress.
 - 17.4.4. Field observations, problems, and decisions.
 - 17.4.5. Identification of problems which impede planned progress.
 - 17.4.6. Review of submittals schedule and status of submittals.
 - 17.4.7. Review of off-site fabrication and delivery schedules.
 - 17.4.8. Maintenance of progress schedule.
 - 17.4.9. Corrective measures to regain projected schedules.
 - 17.4.10. Planned progress during succeeding work period.
 - 17.4.11. Coordination of projected progress.
 - 17.4.12. Maintenance of quality and work standards.
 - 17.4.13. Effect of proposed changes on progress schedule and coordination.
 - 17.4.14. Other business relating to Work.
 - 17.4.15. Schedule next meeting.

HR Green, Inc.
Project No. 191900

WEST INDIAN CREEK (PROJECT A)
SRF SPONSORED PROJECT
CITY OF NEVADA, IOWA

ADDITIONAL TECHNICAL SPECIFICATIONS:
SRF REQUIRED FRONT END SPECIFICATIONS
VEGETATION MAINTENANCE

**SRF Front-End Specifications
FOR NONPOINT SOURCE & SPONSORED PROJECTS**



PLEASE NOTE: Attachment 5 is a new program requirement and is effective for all SRF projects bid after January 2021.

- Attachment 1: Certification of Non-Segregated Facilities Form
- Attachment 2: Statement in Advertisement for Bids on Debarment and Suspension/Certification Regarding Debarment and Suspension Form
- Attachment 3: Other Federal Requirements Language
 - A. Standard Equal Employment Opportunity Specifications
 - B. Preservation of Open Competition and Government Neutrality
 - C. Historical and Archeological Finds
 - D. Prohibitions on Procurement from Violating Facilities
- Attachment 4: Right of Entry and Records Retention
- Attachment 5: Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment

NOTE: Attachments 1, 2, and 5 must be signed by the Prime Contractor and submitted with the bid.

Attachment 1
SRF Required Front-End Specifications

This form must be signed by the Prime Contractor and submitted with the bid.

U.S. Environmental Protection Agency
Certification of Non-Segregated Facilities

(Applicable to contracts, subcontracts, and agreements with applicants who are themselves performing Federally assisted construction contracts, exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause.)

By the submission of this bid, the bidder, offeror, applicant, or subcontractor certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. He certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The bidder, offeror, applicant, or subcontractor agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise. He further agrees that (except where he has obtained identical certifications from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause; that he will retain such certifications in his files; and that he will forward the following notice to such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for specific time periods):

**NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR
CERTIFICATIONS OF NON-SEGREGATED FACILITIES**

A Certification of Non-segregated Facilities, as required by the May 9, 1967, order (33 F.R. 7808, May 28, 1968) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted prior to the award of a subcontract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semiannually, or annually).

Signature

Date

Name and Title of Signer (Please Type)

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

EPA-7 5720-4.2

October 2022

Attachment 2
SRF Required Front-End Specifications

This form must be signed by the Prime Contractor and submitted with the bid.

Debarments and Suspensions

Any bidder or equipment supplier whose firm or affiliate is listed in on the U.S. General Services Administration Excluded Parties List will be prohibited from the bidding process. The excluded parties records search engine is located at the System for Award Management (SAM) website: <https://www.sam.gov/SAM/>. Pursuant to 2 CFR Part 180, as supplemented by 2 CFR 1532, any entity submitting a bid while the SAM website lists that entity as having an active exclusion will be determined by the DNR to be a non-responsive bidder and will not be able to receive SRF funding.

United States Environmental Protection Agency Washington, DC 20460

**Certification Regarding Debarment, Suspension, and
Other Responsibility Matters**

The prospective participant certifies to the best of its knowledge and belief that it and the principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction: violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1) (b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 U SC Sec. 10 01, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

Typed Name & Title of Authorized Representative

Signature of Authorized Representative

Date

I am unable to certify to the above statements. My explanation is attached.

Attachment 3
SRF Required Front-End Specifications

Other Federal Requirements Language

A. Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246)

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
 - (i) Black (all persons having origin in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Sub-continent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 6-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employee in the covered area. Covered construction contractors performing construction work in geographical areas where they do not have a

Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor employees are assigned to work. The Contractor, where possible will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available and maintain a record of the organizations' responses.

c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's effort, to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The

Contractor shall provide notice of these programs to the source complied under 7b above.

f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and test to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

1. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

10. The Contractor shall not use the goals and timetable or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps at least as extensive as those standards prescribed in paragraph 7 of these specifications so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

Federal Register, Vol. 43, No. 68 - Friday, April 7, 1978 (Corrected May 5, 1978).

Effective Date: May 8, 1978

Federal Register, Vol. 45, No. 194. Paragraph 4, revised October 3, 1980

Effective Date: September 30, 1980

APPENDICES A and B-80

Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)

1. The Offerors or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:
(See Appendix B-80 and Appendix A Below)

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and in the regulations in 41 CFR Part 60—4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60—4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60—4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer Identification number of the subcontractor, estimated dollar amount of the subcontract, and the geographical area in which the subcontract is to be performed.

4. As used in this Notice, and in the contract resulting from this solicitation, the “covered area” is (State of Iowa).

APPENDIX A

The following goals and timetables for female utilization shall be included in all Federal and federally assisted construction contracts and subcontracts in excess of \$10,000. The goals are applicable to the contractor’s aggregate on-site construction workforce whether or not part of that workforce is performing work on a Federal or federally assisted construction contract or subcontract.

Area covered: Goals for Women apply nationwide.

Timetable Goals (percent)

From Apr. 1, 1978 until March 31, 19793.1
From Apr. 1, 1979 until March 31, 19805.0
From Apr. 1, 1980 until March 31, 19816.9

Published, Federal Register May 5, 1978

APPENDIX B-80

Until further notice, the following goals for minority utilization in each construction craft and trade shall be included in all Federal or federally assisted construction contracts and subcontracts in excess of \$10,000 to be performed in the respective geographical areas. The goals are applicable to each nonexempt contractor’s total onsite construction workforce, regardless of whether or not part of that workforce is performing work in a Federal, federally assisted or nonfederally related project, contract or subcontract. Construction contractors which are participating in an approved Hometown Plan (see 41 CFR 60—4.5) are required to comply with the goals of the Hometown Plan with regard to construction work they perform in the area covered by the Hometown Plan. With regard to all their other covered construction work, such contractors are required to comply with the applicable SMSA of EA goal contained in this appendix B-80.

Economic Areas

State: Iowa	Goal %
096 Dubuque IA:	
SMSA Counties:	
2200 Dubuque, IA	0.6
IA Dubuque	
Non-SMSA	
Counties	0.5
IA Allamakee, IA Clayton, IA Delaware, IA, Jackson IA, Winneshiek	
099 Davenport Rock Island Moline, IA-IL:	
SMSA Counties:	
1960 Davenport Rock Island Moline, IA-IL	4.6
IL Henry, IL Rock Island Moline, IA Scott	
Non-SMA	
Counties	3.4
IL Carroll, IL Hancock, IL Henderson, IL ,Mercer, IL Whiteside, IA Clinton, IA Des Moines, IA Henry, IA Lee, IA Louisa, IA, Muscatine, MO Clark	
100 Cedar Rapids, IA:	
SMSA Counties:	
1360 Cedar Rapids, IA	1.7
IA Linn	
Non-SMSA Counties	
IA Benton, IA Cedar, IA Iowa, IA Johnson, IA, Jones, IA, Washington	1.5
101 Waterloo, IA:	
SMSA Counties:	
8920 Waterloo-Cedar Falls, IA	4.7
IA Black Hawk	
Non-SMSA Counties	
IA Bremer, IA Buchanan, IA Butler, IA Cerro Gordo, IA Chickasaw, IA Fayette, IA Floyd, IA Franklin, IA Grundy, IA Hancock, IA Hardin, IA Howard, IA Mitchell, IA Winnebago, IA Worth	2.0
102 Fort Dodge, IA:	
Non-SMSA Counties	
IA Buena Vista, IA Calhoun, IA Carroll, IA Clay, IA Dickinson, IA Emmet, IA Greene, IA Hamilton, IA Humboldt, IA Kossuth, IA Palo Alto, IA Pocahontas, IA Sac, IA Webster, IA Wright	0.4
103 Sioux City, IA:	
SMSA Counties:	
7720 Sioux City, IA-NE	1.9
IA Woodbury, NE Dakota	

Non-SMSA Counties	1.2
IA Cherokee, IA Crawford, IA Ida, IA Monona, IA O'Brien, IA Plymouth, IA Sioux, NE Antelope, NE Cedar, NE Cuming, NE Dixon, NE Knox, NE Madison, NE Pierce, NE Stanton, NE Thurston, NE Wayne, SD Bon Homme, SD Clay, SD Union, SD Yankton	
104 Des Moines, IA:	
SMSA Counties:	
2120 Des Moines, IA	4.5
IA Polk, IA Warren	
Non SMSA Counties:	2.4
IA Adair, IA Appanoose, IA Boone, IA Clarke, IA Dallas, IA Davis, IA Decatur, IA Guthrie, IA Jasper, IA Jefferson, IA Keokuk, IA Lucas, IA Madison, IA Mahaska, IA Marion, IA Marshall, IA Monroe, IA Poweshiek, IA Ringgold, IA Story, IA Tama, IA Union, IA Van Buren, IA Wapello, IA Wayne	
143 Omaha, NE:	
SMSA Counties:	
5920 Omaha, NE-IA	7.6
IA Pottawattamie, NE Douglas, NE Sarpy	
Non-SMSA Counties	5.3
IA Adams, IA Audubon, IA Cass, IA Fremont, IA Harrison, IA Mills, IA Montgomery, IA Page, IA Shelby, IA Taylor, NE Burt, NE Cass, NE Colfax, NE Dodge, NE Platte, NE Saunders, NE Washington	

Published, Federal Register October 3, 1980

B. Preservation of Open Competition and Government Neutrality Towards Government Contractors' Labor Relations on Federal and Federally Funded Construction Projects (Executive Order 13202, as amended by Executive Order 13208)

Executive Order 13202, signed February 17, 2001 and amended April 4, 2001, requires all executive agencies that issue grants to ensure Government neutrality toward contractors' labor relations. This applies to recipients of SRF assistance. The Executive Order prohibits discrimination against contractors and their employees in construction contracts based upon labor affiliation or lack thereof.

SRF assistance recipients and any construction managers acting on their behalf must ensure that bidding specifications, project agreements, and other controlling documents do not require, prohibit, or otherwise discriminate, with respect to labor affiliation or lack thereof.

C. Historical and Archeological Finds

If, during the course of construction, evidence of deposits of historical or archeological interest is found, the contractor shall cease operations affecting the find. The owner shall then notify the State Revolving Fund Environmental Review Specialist, who shall in turn notify the State Historic Preservation Office. The SRF shall consult with the SHPO and other interested parties

to determine the proper course of action regarding the discovery. No further disturbance of the deposits shall ensue until the SRF Environmental Review Specialist determines that the project activities in that area may proceed. Compensation to the contractor, if any, for lost time or changes in construction to avoid the find, shall be determined in accordance with changed conditions or change order provisions of the specifications.

Authority for this derives from the National Historic Preservation Act (16 U.S.C. §§ 470 *et seq.*) and 36 CFR Part 800. If human remains are discovered then state law also applies IC 263B.

D. Prohibitions on Procurement from Violating Facilities (Section 306, Clean Air Act; Section 508, Clean Water Act; Executive Order 11738)

Both the Clean Water Act and the Clean Air Act prohibit federal agencies from extending assistance by way of loans or contracts to persons who have been convicted of violations of either law. Executive Order 11738 was issued to coordinate enforcement by the U.S. Environmental Protection Agency, which shall designate facilities which have given rise to a conviction for an offense under the criminal provisions of the Clean Air Act and the Clean Water Act.

The Executive Order also prohibits agencies from extending assistance to facilities that are not in compliance with either Act.

SRF assistance recipients may not procure goods, services, or materials from suppliers listed by the EPA as violators.

The Excluded Parties Listing search engine is located at the System for Award Management (SAM) website: <https://www.sam.gov/SAM/>.

Attachment 4
SRF Required Front-End Specifications

Right of Entry and Records Retention

The recipient shall provide access at all times for the Department of Natural Resources, the Iowa Finance Authority, the state auditor, and the U.S. EPA Office of the Inspector General to all project records and documents for inspection and audit purposes for a period of three years after the date of last loan payment. The same access to the project site(s) shall be provided for inspection purposes.

567 Iowa Administrative Code paragraph 92.8(2).e. State inspections. Personnel of the department shall have the right to examine all construction aspects of the project, including materials and equipment delivered and stored on site for use on the project.

Attachment 5
SRF Required Front-End Specifications

This form must be signed by the Prime Contractor and submitted with the bid.

**PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE
SERVICES OR EQUIPMENT**

This term and condition implements 2 CFR 200.216 and is effective for obligations and expenditures of EPA financial assistance funding on or after 8/13/2020. EPA recipients and subrecipients, including borrowers under EPA funded revolving loan fund programs, are prohibited from obligating or expending loan or grant funds to:

- (a) Procure or obtain, extend or renew a contract to procure or obtain;
- (b) Enter into a contract (or extend or renew a contract) to procure; or
- (c) Obtain the equipment, services, or systems that use “covered telecommunications equipment or services” identified in the regulation as a substantial or essential component of any system, or as critical technology as part of any system.

Certain equipment, systems, or services, including equipment, systems, or services produced or provided by entities subject to the prohibition are recorded in the [System for Award Management](https://www.sam.gov/SAM/) exclusion list, website: <https://www.sam.gov/SAM/>.

- (1) As described in Public Law 115-232, section 889, covered telecommunications equipment or services includes:
 - (i) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
 - (ii) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
 - (iii) Telecommunications or video surveillance services provided by such entities or using such equipment.
 - (iv) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

- (2) Consistent with 2 CFR 200.471, costs incurred for telecommunications and video surveillance services or equipment such as phones, internet, video surveillance, and cloud servers are allowable except for the following circumstances:
 - (i) Obligating or expending EPA funds for covered telecommunications and video surveillance services or equipment or services to procure (enter into, renew or extend contracts) or obtain the equipment, services, or systems as described in 2 CFR 200.216.

I understand the above prohibitions and certify that the project will be in compliance with all the requirements.

Typed Name & Title of Authorized Representative

Signature of Authorized Representative

Date

Operations and Maintenance (O&M) Plan For West Indian Creek (Project A) & Tributary to West Indian Creek (Project B) City of Nevada Iowa

January 2025

HR Green Project No: 191900.01

Prepared for:





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Development of Operations and Maintenance (O&M) Plan

The operations and maintenance (O&M) plan have been developed for the City of Nevada to aid in the maintenance and planning of resources for the West Indian Creek and Tributary to West Indian Creek projects. These proposed (O&M) plans follow State Revolving Fund guidance including the tasks and their frequency.

Responsible Party

The first three growing seasons are covered by the bid documents. After the first three growing seasons, the City of Nevada Parks and Recreation Department shall be responsible for operations, inspections, and maintenance tasks recommended in the plans henceforth.

Inspection Plan

An inspection plan is critical to maintaining native plantings and attaining successful growth.

A minimum of two site visits shall occur annually during the first three growing seasons (2024-2026), once in the spring and once in the fall. One annual visit will be conducted long-term. Additional site visits after a rainfall of greater than 1" are also recommended.

Inspection site visits will consist of

- The general integrity of all improved side slopes to the creek, specifically looking for areas of spot erosion and water conveyance in unintended areas.
- Vegetation monitoring to observe
 - the percentage of vegetative cover by native and non-native vegetation.
- Observation of all practices installed as a part of this project, to ensure that all key elements of each practice remain in place, as designed.
- Observation of possible debris buildup areas, and how they might compare in location and size to existing pre-construction debris jam locations in the creek.

See Maintenance Plan for detailed inspection and maintenance notes.

Maintenance Plan – Native Establishment

Establishment-First Year	Schedule	Responsible Persons
<p>Method 1 - Existing vegetation must be dead before seeding. Remove existing vegetation and all pieces of roots with sod cutter. Seed as soon as possible after preparing the bed. Seed with a native grass drill. Broadcast seeding is sufficient if seed can be worked into the soil with a harrow or similar tool that ultimately establishes good seed-to-soil contact. It is very important that seed is placed at the proper depth to encourage quick germination/emergence (1/4" or less).</p>	<p>April-June or Nov 15-freeze up for dormant seeding</p>	<p>Contractor</p>
<p>Method 2 - Existing vegetation must be dead before seeding. Smother vegetation with cardboard or other material for a growing season. The earliest time to seed is a dormant seeding in the fall or waiting until the following spring or next fall. Seed with a native grass drill. Broadcast seeding is sufficient if the seed can be worked into the soil with a harrow or similar tool that ultimately establishes good seed-to-soil contact. It is very important that seed is placed at the proper depth to encourage quick germination/emergence (1/4" or less).</p>	<p>April-Oct for smothering or Nov 15-freeze up for dormant seeding or Seed following spring April-June</p>	<p>Contractor</p>
<p>Method 3 - Existing vegetation must be dead before seeding. Chemical applications may be used to kill sod or other vegetation. Apply in the fall for the next growing season and in the spring prior to planting. Follow all label directions. Seed with a no-till drill. It is very important that the seed is placed at the proper depth to encourage quick germination/emergence (1/4" or less).</p>	<p>Sept-Oct 15 and following May for chemical spraying or May-June seeding</p>	<p>Contractor</p>
<p>Method 4 - Existing vegetation must be dead before seeding. Remove existing vegetation with multiple tillage passes. (new weed seed will germinate with tillage) Prepare a good firm seedbed. When you walk on the surface, you don't want to sink. You barely want to see your footprint. Seed with a native grass drill. Broadcast seeding is sufficient if the seed can be worked into the soil with a harrow or similar tool that ultimately establishes good seed-to-soil contact. It is very important that seed is placed at the proper depth to encourage quick germination/emergence (1/4" or less).</p>	<p>April-June Nov 15-freeze up for dormant seeding</p>	<p>Contractor</p>
<p>Temporary RECP to be installed per plans</p>	<p>Immediately after seeding</p>	<p>Contractor</p>
<p>If it doesn't rain, water the seed. Water enough to moisten the surrounding soil, but water lightly so seedlings are not dislodged. As seedlings emerge and develop, irrigate less frequently but enough to prevent drought stress.</p>	<p>Spring until established</p>	<p>Contractor</p>

Establishment-First Year	Schedule	Responsible Persons
Persistent attention to weed control is required. Keep weeds cut back to a height of 6 inches when they reach a height of 12 inches. The first mowing if done early enough can be to a height of 3-4 inches. Flat-type mowers work best because they chop weeds and prevent clippings from smothering small seedlings. Weed trimmers are excellent for smaller areas. Rotary or bar-sickle mowers may be used but can smother seedlings because they do not chop weeds. Hand weeding may also be necessary.	One to two times per month depending on rainfall, not after Aug 1	Contractor
Do not mow the first year's growth after August 1. This will protect young plants over winter.	First-year	Contractor
Do not spray any broadleaf chemicals in the first year. Broadleaf chemicals will kill forbs and damage or kill grasses.	First-year	Contractor
Evaluate the prairie stand.	Fall	Contractor

Establishment - Second Year	Schedule	Responsible Persons
Persistent attention to weed control is required. Keep weeds cut back. Mow seedlings at a height of 6 inches when vegetation has a height of 12 inches. Flat-type mowers work best because they chop weeds and prevent clippings from smothering small seedlings. Weed trimmers are excellent for smaller areas. Rotary or bar-sickle mowers may be used but can smother seedlings because they do not chop weeds. Hand weeding may also be necessary.	One time per month depending on rainfall	Contractor
Water only enough to maintain growth and prevent dormancy. Be careful not to overwater, as this can increase competition with weeds and may increase the incidence of disease.	As needed	Contractor
Overseed bare patches. Keep overseeded areas moist for the first few weeks.	April-July 1 st	Contractor
Do not spot-treat with chemicals until year 3.	After year 2	Contractor
Evaluate the prairie stand	After year 2	Contractor

Establishment - Third Year	Schedule	Responsible Persons
Evaluate the stand. Continue controlling weeds with spot treatment or mowing. Cut and stump treat woody species. Utilize prescribed burning to stimulate native growth and control woody species, but check with local jurisdictions on burning regulations.	April - Nov	Contractor



Establishment - After the Third Year	Schedule	Responsible Persons
Evaluate the stand. Continue controlling weeds with spot treatment or mowing. Cut and stump treat woody species. Utilize prescribed burning to stimulate native growth and control woody species, but check with local jurisdictions on burning regulations.	April - Nov	City

Maintenance Plan – Stream Items

Activity	Schedule	Responsible Persons
If erosion control blankets or TRM are used to control erosion during the establishment of vegetative cover, inspect to ensure they are staying in place, installed per manufacturer, and providing protection.	During vegetative establishment	City
Inspect to ensure that no erosion is occurring. Install needed erosion control measures and/or re-seed as needed.	Annually	City
Riprap: inspect to ensure rip rap has not moved and is performing as designed for both the toe protection and riffles	After Major Storm Events	City
Inspect to ensure there are no log or debris jams or other obstructions restricting or deflecting flows in a manner that causes erosion or other problems.	After Major Storm Events	City

Certification

I certify that the City of Nevada, Iowa commits to the specific work elements in this plan for the duration of 20 years from date of the practice certified as completed.

Signature

Date

Title

HR Green, Inc.
Project No. 191900

WEST INDIAN CREEK (PROJECT A)
SRF SPONSORED PROJECT
CITY OF NEVADA, IOWA

ADDITIONAL INFORMATION:
USACE PERMIT
IDNR FLOODPLAIN PERMIT



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, ROCK ISLAND DISTRICT
PO BOX 2004 CLOCK TOWER BUILDING
ROCK ISLAND, ILLINOIS 61204-2004

April 19, 2024

Regulatory Division

SUBJECT: CEMVR-RD-2023-817

Mr. Tim Hansen
City of Nevada
1209 6th Street
Nevada, Iowa 50201

Dear Mr. Hansen:

We are enclosing a Department of the Army permit authorizing work in conjunction with the stabilization of West Indian Creek and a small tributary to West Indian Creek located in Section 7, Township 83 North, Range 22 West and Section 12 Township 83 North, Range 23 West, in Story County, Iowa.

If you find it necessary to make changes in this authorization, you must submit revised plans to this office for approval before beginning work. You should also have all required Federal, state, and local approvals prior to commencing work.

Please notify this office prior to starting and completion of work. You are required to complete and return the enclosed "Completed Work Certification" upon completion of your project. A representative of this office will make periodic inspections of the work.

Should you have any questions, please contact me by letter, telephone at 309-215-5570 or email at Albert.J.Frohlich@usace.army.mil.

Sincerely,

A handwritten signature in cursive script that reads "Albert J. Frohlich".

Albert J. Frohlich
Project Manager – Regulatory Division
Rock Island District

Copies Furnished: (w/ enclosures)

Iowa Department of Natural Resources
Floodplain Management Division

US EPA – Region 7

Mr. Sandy Pumphrey
HR Green
8710 Earhart Lane SW
Cedar Rapids, Iowa 52404

COMPLETED WORK CERTIFICATION

Permit Number: CEMVR-RD-2023-817

Name of Permittee: City of Nevada

County/State: Story / Iowa

Date of Issuance: April 19, 2024

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

U.S. Army Engineer District, Rock Island
ATTN: Regulatory Branch
Clock Tower Building
Post Office Box 2004
Rock Island, Illinois 61204-2004

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above reference permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

DEPARTMENT OF THE ARMY PERMIT

Permit Number: CEMVR-RD-2023-1223

Section 404

Permittee: City of Nevada
1209 6th Street
Nevada, Iowa 50201

POC: Tim Hansen

Tel:

Tel: 515-382-4352

Effective Date: 19 April 2024

Expiration Date: 31 December 2026

Issuing Office: U.S. Army Corps of Engineers, Rock Island District
Clock Tower Building - P.O. Box 2004
Rock Island, Illinois 61204-2004

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: The Permittee will complete two projects, one to stabilize Indian Creek from the approximately 750 feet downstream of West Lincoln Highway to approximately 650 feet upstream of E Avenue (Project A). The total project (A) is approximately 4,100 feet in length and will result in roughly 8,100' of restored streambanks along Indian Creek. The second project (Project B) is to stabilize two small unnamed tributaries of West Indian Creek. One segment is 700 feet and the other is 600 feet.

To accomplish Project A, the Permittee will first clear non-native woody shrubs from the project area and remove log jams from West Indian Creek. Trees marked for protection will not be removed from the project area. An existing crossing near Sta. 56+00 will be removed and a temporary work pad installed to facilitate the removal. Following preparation of the site, several vertical banks throughout the project area will be flattened to a 3:1 slope. Several areas will be stabilized with fabric encapsulated soils lifts with live staking and wooden toe protection. Cross vein weirs will be placed throughout the project area for grade control. Traditional bank stabilization will be used in some areas with the inclusion of large woody debris. Cofferdams will be utilized and the exact locations will be determined by the contractor. All disturbed areas will be replanted with native mesic or wet prairie mixes and trees replanted along the banks.

Project A will include one small channel realignment at Sta 65+00 for a distance of approximately 60 feet. At this location a small point bar will be removed and the channel geometry flattened.

To accomplish Project B, the Permittee will first clear the tributaries of brick, rubble and woody debris such as log jams or other obstacles in the streams. Work in these tributaries will include cross vein weirs, rock check dams to slow the flow of water, soil lifts and stone toe protection. A small

rock pool structure will be installed near the confluence with project A and a 15-foot long dry detention basin will be installed. All areas will be seeded with the same native mix used on West Indian Creek. This portion of the project will not result in any channel relocation or loss of Waters of the U.S.

Methods proposed are stone toe protection and bio-engineered techniques including soil lifts, floodplain benches, restoration with native vegetation, large woody debris and cross vane weirs to reduce erosion along the waterway.

Work in the waterways will be timed to take place during low or no-flow conditions. The cofferdam will be constructed of non-erodible materials (steel sheets, aqua barriers, rip rap, geotextile liner, etc.). Earthen cofferdams will not be used. Cofferdams will be constructed from the upland area and no equipment will enter the water at any time. If necessary, equipment will enter the coffered area to perform the required work once the cofferdam is in place and the isolated area is dewatered. Bypass pumping shall be monitored to ensure that sediments are not being transported to the downstream waterways by pumping activities. Dewatered water from the isolated areas shall be filtered to remove sediments. Once construction is complete and the creek has been stabilized with riprap, seeding, and erosion control blanket, the cofferdam will be removed.

Impacts from the channel relocation at Sta. 65+00 are less than 0.01 acres and other impacts to both streams will be temporary and only 0.05 acres of streambed are expected to be disturbed.

Stream mitigation for this project will not be required because losses of Waters of the U.S. are minor. There are no wetland impacts in the project area.

Project Location: The project is located on West Indian Creek and a tributary to West Indian Creek in Section 7, Township 83 North, Range 22 West and Section 12, Township 83 North, Range 23 West, Story County, Iowa within the City of Nevada. Lat. 42.0199, Lon. -93.4647

Maps, Drawings and Attachments:

CEMVR-RD-2023-817 – Project Locations - Sheet 1 of 42
CEMVR-RD-2023-817 – Demolition Plans (Project A) – Sheets 2 thru 10 of 42
CEMVR-RD-2023-817 – Plan and Profile (Project A) – Sheets 10 thru 18 of 42
CEMVR-RD-2023-817 – Restoration and Erosion Control (Project A) – Sheets 19 thru 26 of 42
CEMVR-RD-2023-817 – Structure Details (Project A) – Sheets 27 thru 29 of 42
CEMVR-RD-2023-817 – Overall Site Plan (Project B) – Sheets 31 of 42
CEMVR-RD-2023-817 – Demolition Plans (Project B) - Sheets 32 of 42
CEMVR-RD-2023-817 – Plan and Profile (Project B) – Sheets 33 thru 35 of 42
CEMVR-RD-2023-817 – Restoration and Erosion Control (Project B) – Sheets 36 thru 38 of 42
CEMVR-RD-2023-817 – Structure Details (Project B) – Sheets 39 thru 42) of 42
Water Quality Certification

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on the date specified on page 1. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before that date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party, in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archaeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. All of the conditions listed in the Iowa Department of Natural Resources Individual Water Quality Certification dated March 11, 2024 shall be considered part of this permit.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

() Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

() Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

<i>Jordan Cook</i>	April 19, 2024
Permittee	Date

This issuing officer for this permit is Jesse T. Curry, Colonel, U.S. Army, District Engineer, Rock Island District.

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, and in accordance with CEMVR-OD-P appointment order 24 July 2022 has signed below.

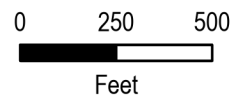
<i>Albert J. Frohlich</i>	19 April 2024
Name Project Manager	Date

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

Transferee	Date



West Indian Creek
Projects A & B



Date Printed:
3/18/2024

Created By:

1 inch equals 500 feet

2/4/2025

CITY OF NEVADA & CITY OF NEVADA
C/O SANDY PUMPHREY
HR GREEN
8710 EARHART LANE SW
CEDAR RAPIDS, IA 52404

Project Description: Proposed City of Nevada West Indian Creek Improvement Project Including: Removal Existing Vented Low Water Crossing and Debris Jams Throughout Corridor, 3,38 Feet Alignment and Widening Channel Change (STA 42+62.17 – STA 80+00), 7 Each Approximately 16'(l)x12'(w)x2'-2.5'(t) Rock Cross Stream Obstructions / Rock Riffles, and Approximately 2,850 Feet Combined Length 2' Class E Riprap Blanket on 2:1 Typical Slopes; (West Indian Creek)

Project Latitude / Longitude Location(s): Channel Changes 42.0176/-93.4645; Story County

Iowa DNR Project Tracking Number: 2023-1144

Dear Sandy Pumphrey:

The application for an Iowa DNR Flood Plain Development Permit for the above referenced project has been approved. This approval does not include any temporary channel obstructions. Flood Plain Development Permit Number 2023-1144FP-01 and an approved copy of the Iowa DNR Approved Plans are enclosed. You may download additional copies, or verify the Iowa DNR Flood Plain and Dam Safety Section (Department) official response document(s) for this project at the Iowa DNR Flood Plain PERMT website using the tracking number above. (PERMT Website Address: <https://programs.iowadnr.gov/perm/>)

Please review all permit conditions. If you don't agree with any of the permit conditions, you have 30 days from the date of mailing of the permit to appeal. If you wish to appeal, it is suggested that you contact Noah Poppelreiter at 515-669-8752, Iowa DNR Legal Services Bureau, within 15 days to determine the correct procedure and format. Also, you should be aware of the fact that any person can appeal the issuance of this permit within the same 30 day period.

Within 30 days of the completion of construction, proper completion of construction notice shall be provided to the Department. Notice may be provided through the Department PERMT website <https://programs.iowadnr.gov/perm/>, or by certified mail. Certified mail requirements are provided in permit document post construction condition section.

The project may require a local flood plain development permit(s) from Nevada. If you have not yet done so, please contact the following local Flood Plain Manager(s) for assistance in applying for the local flood plain permit(s):

- Nevada: Ryan Hutton, City of Nevada, 1209 6th St, PO Box 540, Nevada, IA, 50201-0530, rhutton@cityofnevadaiaowa.org, 515-382-5466

No land or water, under the jurisdiction of the State of Iowa, is involved in the project area; therefore, a Sovereign Lands Construction Permit pursuant to Chapter 461A of the Iowa Code will not be required for this project.

The permittee is responsible for complying with all other local, state, and federal statutes, ordinances, rules, and

permit requirements applicable to the construction, operation, and maintenance of the approved works. Approval through the Corps of Engineers Section (US ACE) are made through the US ACE Regulatory Request System (RRS) on line application system. <https://rrs.usace.army.mil/>

Please contact me by phone at 515-601-2035 or by email at Chad.Billings@dnr.iowa.gov with any questions.

Sincerely,
Chad Billings
Iowa DNR, Flood Plain Management and Dam Safety Section

CC: Tim Hansen; City of Nevada, 1209 6th St, Nevada, IA, 50201, thansen@cityofnevadaaiowa.org
Jordan Cook; City of Nevada, 1209 6th St, Nevada, IA, 50201, jcook@cityofnevadaaiowa.org
Jaclyn Gutman; HR Green, 2363 Sequoia Drive, Suite 101, Aurora, IL, 60506, jgutman@hrgreen.com
Jeff Macke; HR Green, 1391 Corporate Drive, Suite 203, McHenry, IL, 60050, jeff.macke@hrgreen.com
Kate Barnes; HR Green, 5525 Merle Hay Rd, Suite 200, Johnston, IA, 50131, kate.barnes@hrgreen.com
Nevada: Ryan Hutton, City of Nevada, 1209 6th St, PO Box 540, PO Box 540, Nevada, IA, 50201-0530, rhutton@cityofnevadaaiowa.org

Attachments



Iowa Department of Natural Resources

Flood Plain Development Permit

- I. Permit Number 2023-1144FP-01
- II. Project Latitude / Longitude Channel Changes 42.0176/-93.4645; Story County
Location(s)
- III. Approved Activity Proposed City of Nevada West Indian Creek Improvement Project Including: Removal Existing Vented Low Water Crossing and Debris Jams Throughout Corridor, 3,38 Feet Alignment and Widening Channel Change (STA 42+62.17 – STA 80+00), 7 Each Approximately 16'(l)x12'(w)x2'-2.5'(t) Rock Cross Stream Obstructions / Rock Riffles, and Approximately 2,850 Feet Combined Length 2' Class E Riprap Blanket on 2:1 Typical Slopes; (West Indian Creek)
- IV. Applicant(s) / Permittee(s) TIM HANSEN JORDAN COOK
Company(s) CITY OF NEVADA CITY OF NEVADA
Address(s) 1209 6TH ST 1209 6TH ST
City State Zip NEVADA, IA 50201 NEVADA, IA 50201
- V. Authorized Agent SANDY PUMPHREY
Company HR GREEN
Address 8710 EARHART LANE SW
City State Zip CEDAR RAPIDS, IA 52404
- VI. Basis for Issuance The decision to issue this permit was based on a staff review of the project with respect to relevant approval criteria contained in 567 IAC 72 and applicable provisions of Iowa Code Sections 455B.262, .264, .275 and .277.
- VII. General Permit Conditions
- a. Responsibility No legal or financial responsibility arising from the construction or maintenance of the approved works shall attach to the state of Iowa or the agency due to the issuance of a permit, order, or administrative waiver.
 - b. Lands The permittee shall be responsible for obtaining such government licenses, permits, and approvals, and lands, easements, and rights-of-way which are required for the construction, operation, and maintenance of the authorized works prior to construction.
 - c. Change in plans No material change from the plans and specifications approved by the Department shall be made unless authorized by the Department.
 - d. Revocation of order A Department permit may be revoked if construction is not completed within the permit construction period of time specified in the Department permit, or extended by official post permit response letter from this Department.
 - e. Appeal of Initial Decision Per 567 IAC 70.5(4), this permit represents the initial decision of the Department. You have 30 days from the date of mailing of the permit to appeal. If you wish to appeal, it is suggested that you contact our Legal Services Section within 15 days to determine the correct procedure and format. Also, you should be aware of the fact that any person can appeal the issuance of this permit within the same 30 day period.
- VIII. Permit Special Construction

Conditions

- a. Permit Construction Period Covered 2/4/2025 to 2/4/2028
- b. Temporary Flood Plain Obstruction Requirement All temporary flood plain obstructions to be used during construction shall comply with all sections of 567 IAC 72.1(6).
- c. Revetment Requirements. Acceptable riprap material includes: field stone, quarry rock, and broken concrete. If any broken concrete is used, all exposed reinforcing steel must be cut off flush with the surface of the concrete prior to placing the riprap. Also, any concrete pieces larger than three feet across shall either be broken into smaller pieces prior to placement or not used as riprap material. The use of asphalt or other solid waste is prohibited. The finished bank slope on the riprap revetment shall be no steeper than one and one half feet horizontal to one foot vertical (1.5H:1V). In locations to receive revetment, the area shall be over excavated as required so that the finished surface elevation of the revetment shall not be elevated above the plan elevation. The armoring material shall not extend vertically above the natural surface elevation of the adjacent top of bank.
- d. Spoil Disposal / Floodway Corridor Requirements. Erosion control materials, clearing and grubbing refuse, spoil / top soil storage, demolition/rubble, construction materials, and/or stockpiles shall not be placed within any Floodway Zone delineated in the Flood Insurance Study without prior Iowa DNR approval.
- e. Channel Change Requirements. The horizontal and vertical alignments of each of the new channels shall be such as to provide smooth transitions between the excavated and existing channel or definite erosion control measures shall be undertaken to ensure bank stability. The new channel segment shall be excavated such that the stream banks have 1.5H:1V or flatter side slope. The horizontal and vertical alignments of the new channel segments with a proposed typical trapezoidal section with a 12' wide bottom and standard 2-3(H):1(V) side slopes shall be such as to provide smooth transitions between the excavated and existing channels or definite erosion control measures such as placing riprap shall be undertaken to ensure bank and/or channel stability. The proposed seven rock riffle structures will be allowed in the new channel, but the riffles must consist of field stone, quarry rock, or broken concrete (free of exposed reinforcing steel) and must not exceed a height of approximately 0.5 ft. The new channel does not need to be over-excavated to compensate for the reduced channel area and depth that will result from the installation of the riffle structures.
- f. Limitation on Additional Channelization Requirements. Any channelization or remeandering beyond that of the current permit plans shall not be commenced without prior approval of the Iowa Department of Natural Resources. Note that the Department's rules only allow a maximum cumulative reduction in channel length of 25 percent.
- g. Flood Insurance Study Requirements. The permittee shall be responsible for obtaining a No-Rise Certification (i.e., no more than a 0.00 ft. increase to the 100-year encroached and natural profiles for the condition with the proposed project) prepared by a professional engineer licensed in Iowa and forwarding a copy of the certification to the City of Nevada Flood Plain Manager for local flood plain permit program documentation purposes.

IX. Permit Post Construction Conditions

- a. Certification of Completion of Construction Requirement
- The permittee is required to provide notice to the Iowa DNR that construction of the project authorized by the Iowa Department of Natural Resources was completed in accordance with Iowa DNR Approved Plans and specifications.
1. This notice may be provided on the Iowa DNR PERMT Website

Iowa DNR PERMT Website (use Permit Number)

<https://programs.iowadnr.gov/permt/>

2. If computer access is unavailable, the permittee shall submit a signed certification of project construction completion. The certification(s) shall be submitted to:

FLOOD PLAIN PERMITS
IOWA DNR
6200 PARK AVENUE SUITE 200
DES MOINES IA 50321

b. General Maintenance and Storm Damage Restoration Requirement The permittee, and any successor, in interest to the real estate on which the permitted project or activity is located shall be responsible for proper maintenance of the project until this permit is revoked, or replaced with a new permit. The required maintenance shall include, but is not limited to, the restoration of the project back to the permit condition shown on the enclosed Iowa DNR Approved Plan document.

c. Perpetual Site Inspection and Maintenance Requirements: The permittee shall be responsible for yearly inspection and maintaining the Indian Creek banks for the limits of the proposed project in order to maintain the Manning's roughness coefficient value used for modeling of this reach. This maintenance shall include but is not limited to: consistent and regular clearing of trees and brush, and restoration of design elements (grading, stream alignment and stabilization measures). This maintenance shall be perpetual and continuous.

X. Permit Issued By:

Chad Billings; Iowa DNR, Flood Plain Management and Dam Safety Section

Date: 2/4/2025

HR Green, Inc.
Project No. 191900

WEST INDIAN CREEK (PROJECT A)
SRF SPONSORED PROJECT
CITY OF NEVADA, IOWA

ADDITIONAL INFORMATION:
GEOTECHNICAL REPORT

Geotechnical Evaluation Report

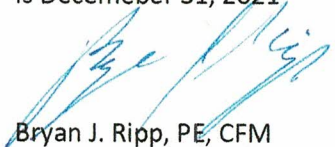
West Indian Creek East Bank Restoration
I Avenue and 1st Street
Nevada, Iowa

Prepared for

H.R. Green, Inc.

Professional Certification:

I hereby certify that this report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa. My license renewal date is Decemeber 31, 2021.



Bryan J. Ripp, PE, CFM
Senior Engineer
License Number: 20958
May 19, 2021



May 19, 2021

Project B2102398

Isaac Schrock, PE
H.R. Green, Inc.
8710 Earhart Lane SW
Cedar Rapids, IA 52404

Re: Geotechnical Evaluation
West Indian Creek East Bank Restoration
I Avenue and 1st Street
Nevada, Iowa

Dear Mr. Schrock:

We are pleased to present this Geotechnical Evaluation Report for the West Indian Creek East Bank Restoration in Nevada, Iowa.

Thank you for making Braun Intertec your geotechnical consultant for this project. If you have questions about this report, or if there are other services that we can provide in support of our work to date, please contact Bryan Ripp at 612.845.4475 (bripp@braunintertec.com)

Sincerely,

BRAUN INTERTEC CORPORATION



Bryan J. Ripp, PE, CFM
Senior Engineer



Buddika Godagama, PE
Project Engineer

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Soil Boring Location Sketch
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 Descriptive Terminology of Soil
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 Slope Stability Analyses Graphical Result

A. Introduction

A.1. Project Description

The site is located 1/4-mile northwest of the I Avenue and 1st Street intersection, and along West Indian Creek. The creek flows from north to south along the west edge of the Nevada Municipal Cemetery property. We understand that H.R. Green, Inc. (HR Green) is exploring the feasibility of a concept design for the West Indian Creek stream restoration for the City of Nevada.

We understand that this project includes approximately 1,000 linear-foot section along the East Bank of West Indian Creek. We also understand that the existing bank bluff is roughly 20 to 30 feet high as measured vertically from the bank toe to the bank crest . Based on the provided information, we estimate that in general the distance between the edge of cemetery driveway located near top of the bluff and the bank crest averages approximately 20 feet. However, we estimated that at Station 68605 the distance between the edge of the driveway and the bank crest narrows down to about 12 feet. According to the Project Narrative and Watershed Assessment document, the City of Nevada had placed haphazard riprap to mitigate the bank erosion. The document also indicates that slope surface failure due to erosion is present towards the south end of the property.

A.2. Site Visit

We completed a site visit on May 7, 2021 to observe the existing condition at the East Bank. We walked along the bank crest and the bank toe between Stations 67961 to 68605. Towards Station 68605, we observed the haphazard riprap covering the slope surface from the bank crest down to the creek. We also noted the lack of vegetation in the area around where riprap was placed. The slope surface was bare and soil appeared to be loose. It also appeared that some of the mature trees providing stability to the slope surface along the bank were damaged during the riprap placement. We observed dense vegetation consisting of mature trees and undergrowth on the slope surface between Stations 67961 to 68243. We did not observe indications of slope surface failure in this area. In general, we observed the bank slope angles to be between 1:1 to 1.5:1 (horizontal:vertical). During our walk along the bank toe, we observed toe erosion along the bank, except where riprap was placed. During our site visit, we did not observe the existing conditions in the area south of Station 67961.

A.3. Purpose

The purpose of our geotechnical evaluation was to characterize subsurface geologic conditions at selected exploration locations, conduct global slope stability evaluations for determining the basis for slope restoration. Then, based on this information provide a discussion and recommendations pertaining to geotechnical aspects of the East Bank restoration.

A.4. Background Information and Reference Documents

In order to facilitate our evaluation, we reviewed the following information:

- An email requesting a scope of services for the proposed project sent by HR Green dated January 13, 2021.
- A GIS map indicating the proposed project location sent by HR Green.
- Project Narrative and Watershed Assessment document provided by HR Green (not dated).
- LiDAR and survey data for the stream bank cross sections provided by HR Green.
- Google Earth™ Imagery of the project site.

We have described our understanding of the proposed construction and site to the extent others reported it to us. Depending on the extent of available information, we may have made assumptions based on our experience with similar projects. If we have not correctly recorded or interpreted the project details, the project team should notify us. New or changed information could require additional evaluation, analyses and/or recommendations.

A.5. Scope of Services

We performed our scope of services for the project in general accordance with our Proposal for a Geotechnical Evaluation authorized on March 23, 2021. The following list describes the geotechnical tasks completed in accordance with our authorized scope of services.

- Reviewed the background information and reference documents previously cited.
- Staked boring locations and cleared them of underground utilities prior to drilling. The Soil Boring Location Plan included in the Appendix shows the approximate boring locations.
- Drilled three borings (B-17, B-18 and B-19) along the West Indian Creek East Bank to a depth of 40 feet below grade.

- Either split-spoon samples (taken during SPT testing) or thin-walled tube samples were obtained at 2½- to 5-foot intervals throughout the boring.
- Tested select samples in our laboratory for soil classification and engineering analysis.
- Prepared this report containing a boring location plan, logs of soil borings, a summary of the soils encountered, results of laboratory tests, east bank slope stability evaluation and recommendations pertaining to the restoration of the creek bank.

B. Results

B.1. Geologic Overview

We based the geologic origins used in this report on the soil types, in-situ and laboratory testing, and available common knowledge of the geological history of the site. Because of the complex depositional history, geologic origins can be difficult to ascertain. We did not perform a detailed investigation of the geologic history for the site.

B.2. Boring Results

Table 1 provides a summary of the soil boring results, in the general order we encountered the strata. Please refer to the Log of Boring sheets in the Appendix for additional details. The Descriptive Terminology sheet in the Appendix include definitions of abbreviations used in Table 1. We reference all depths below existing ground surface.

Table 1. Subsurface Profile Summary

Strata	Soil Type - ASTM Classification	Range of Penetration Resistances	Commentary and Details
Topsoil	---	---	<ul style="list-style-type: none"> ▪ Present in all Borings. ▪ Approximately 12 to 24 inches thick.
Loess	CL	4 to 6 BPF	<ul style="list-style-type: none"> ▪ Present in Borings B-17 and B-18 below topsoil. ▪ Encountered to a depth of 6 feet. ▪ Generally, lean clay with sand. ▪ Moist and brown. ▪ Soft to medium consistency.

Strata	Soil Type - ASTM Classification	Range of Penetration Resistances	Commentary and Details
Glacial Till	CL	4 to 17 BPF	<ul style="list-style-type: none"> ▪ Present in all borings until termination depth of 40 feet. ▪ Encountered below topsoil in Boring B-19 and, below loess in Borings B-17 and B-18. ▪ Varying amounts of sand with trace gravel. ▪ Moist, brown and gray. ▪ Medium to very stiff consistency.

*Abbreviations defined in the attached Descriptive Terminology sheets.

B.3. Groundwater

We observed groundwater while drilling and sampling Boring B-19. Table 2 summarizes the depths and elevations where we observed groundwater. We also installed a piezometer at Boring B-19 to obtain delayed groundwater measurements. We measured delayed groundwater after 14 days. We did not observe groundwater during drilling and sampling process in Borings B-17 and B-18. We expect that groundwater levels will fluctuate with seasonal variations, periods of heavy or prolonged precipitation and the water level in West Indian Creek.

Table 2. Groundwater Summary

Boring	Surface Elevation (feet)	Groundwater Depth (feet)	Groundwater Elevation (feet)
B-19 while drilling	976	35	941
B-19 After last sample		37	939
B-19 delayed measurement		25	951

B.4. Laboratory Test Results

The boring logs show the results of laboratory testing we performed using standard ASTM methods next to the tested sample depth. We also performed a consolidated-undrained shear strength tests on selected samples to estimate soil properties for our evaluations. The Appendix contains the results of the two consolidate-undrained shear strength tests and an unconfined compressive strength test.

C. Analytical Modeling

C.1. Back Analyses

We analyzed the stability of the existing bank at three cross sections which intersect our borings. The borings and corresponding cross sections from upstream to downstream as designated by HR Green, are:

- Boring B-17, Section 68605
- Boring B-19, Section 68243
- Boring B-18, Section 67961

For our stability analyses we used the computer program Slide™ by ROCSCIENCE™. We used boring information and engineering judgement to evaluate soil layer depths and thickness when developing soil profiles. We also used laboratory testing, soil property correlations and our experiences with similar soils to develop soil parameters used in this analysis. The cross-section locations are shown on the Boring Location Sketch. We summarize our material properties in Table 3.

Table 3. Material Properties

Material	Unified Soil Classification	Density (pounds per cubic foot)	Effective Friction (degrees)	Effective Cohesion (pounds per square foot)	Basis of Properties
Loess	CL	120	26	50	Soil Index Properties and Background Knowledge
Glacial Till	CL	130	34	150	Consolidated-Undrained Triaxial Shear Tests

We analyzed the global stability of East bank for creek conditions at baseflow, 10-year flood (10% change of annual exceedance) and 100-year flood (1% chance of annual exceedance).

C.2. Analytical Results

The analyses revealed that the most critical creek stage was at baseflow. We present the factors of safety for each cross section at baseflow in Table 4. We estimated the global factor of safety where critical failure surfaces intersected the edge of cemetery driveway, which is considered critical infrastructure. The typical minimum allowable factor of safety for critical infrastructure is 1.5. As indicated by the table below, our analyzed yielded factors of safety at or above 1.5 for all sections. We present the graphical outputs of our analysis results for baseflow in the appendix.

Table 4. Global Slope Stability Analysis Results

Cross Section	Calculated Factor of Safety	Minimum Allowable Factor of Safety
Boring B-17, Section 68605	1.6	1.5
Boring B-19, Section 68243	1.7	1.5
Boring B-18, Section 67961	2.2	1.5

D. Recommendations

D.1. Mitigation Design

As stated earlier, acceptable factors of safety for the cemetery road were determined through our slope stability analyses. However, surface sloughing may occur along the creek banks. Maintaining woody vegetation along the banks should reduce sloughing potential through root reinforcement of the soil. Further, placing concrete for bank protection actually could reduce surface stability in that the vegetation along the banks is covered or snapped off, such as the trees. We recommend, placing no more concrete on the banks, and if possible, reestablishing vegetation along these banks, such as through joint planting. In addition, protection of the toe from creek erosion should also reduce the sloughing potential.

D.2. Final Design Plan Preparation, Submittal and Review

This report is based on a limited amount of information, and a number of assumptions were necessary to help us develop our recommendations. It is recommended that our firm review the geotechnical aspects of the final design plans, specifications and calculations, and evaluate whether the design is as expected, if any design changes have affected the validity of our recommendations, and if our recommendations have been correctly interpreted and implemented in the designs and specifications.

E. Procedures

E.1. Penetration Test Borings

We drilled the penetration test borings with a truck-mounted drill rig equipped with hollow-stem augers. We performed the borings in general accordance with ASTM D6151 taking penetration test or thin-

walled samples at 2 1/2- or 5-foot intervals in general accordance to ASTM D1586 or 1587, respectively. The boring logs show the actual sample types, intervals and corresponding depths.

E.2. Exploration Logs

E.2.a. Log of Boring Sheets

The Appendix includes Log of Boring sheets for our penetration test borings. The logs identify and describe the penetrated geologic materials and present the results of penetration resistance. The logs also present the results of laboratory tests performed on penetration test samples, and groundwater measurements.

We inferred strata boundaries from changes in the penetration test samples and the auger cuttings. Because we did not perform continuous sampling, the strata boundary depths are only approximate. The boundary depths likely vary away from the boring locations, and the boundaries themselves may occur as gradual rather than abrupt transitions.

E.2.b. Geologic Origins

We assigned geologic origins to the materials shown on the logs and referenced within this report, based on: (1) a review of the background information and reference documents cited above, (2) visual classification of the various geologic material samples retrieved during the course of our subsurface exploration, (3) penetration resistance testing performed for the project, (4) laboratory test results, and (5) available common knowledge of the geologic processes and environments that have impacted the site and surrounding area in the past.

E.3. Material Classification and Testing

E.3.a. Visual and Manual Classification

We visually and manually classified the geologic materials encountered based on ASTM D2488. When we performed laboratory classification tests, we used the results to classify the geologic materials in accordance with ASTM D2487. The Appendix includes a chart explaining the classification system.

E.3.b. Laboratory Testing

The exploration logs in the Appendix note most of the results of the laboratory tests performed on geologic material samples. The remaining laboratory test results follow the exploration logs. We performed the tests in general accordance with ASTM or AASHTO procedures.

E.4. Groundwater Measurements

The drillers checked for groundwater while advancing the penetration test borings with hollow stem augers. We also performed delayed groundwater observations using a piezometer installed during our drilling work.

F. Qualifications

F.1. Variations in Subsurface Conditions

F.1.a. Material Strata

We developed our evaluation, analyses and recommendations from a limited amount of site and subsurface information. It is not standard engineering practice to retrieve material samples from exploration locations continuously with depth. Therefore, we must infer strata boundaries and thicknesses to some extent. Strata boundaries may also be gradual transitions, and project planning should expect the strata to vary in depth, elevation and thickness, away from the exploration locations.

Variations in subsurface conditions present between exploration locations may not be revealed until performing additional exploration work, or starting construction. If future activity for this project reveals any such variations, you should notify us so that we may reevaluate our recommendations. Such variations could increase construction costs, and we recommend including a contingency to accommodate them.

F.1.b. Groundwater Levels

We made groundwater measurements under the conditions reported herein and shown on the exploration logs, and interpreted in the text of this report. Note that the observation periods were relatively short, and project planning can expect groundwater levels to fluctuate in response to rainfall, flooding, irrigation, seasonal freezing and thawing, surface drainage modifications and other seasonal and annual factors.

F.2. Continuity of Professional Responsibility

F.2.a. Plan Review

We based this report on a limited amount of information, and we made a number of assumptions to help us develop our recommendations. We should be retained to review the geotechnical aspects of the

designs and specifications. This review will allow us to evaluate whether we anticipated the design correctly, if any design changes affect the validity of our recommendations, and if the design and specifications correctly interpret and implement our recommendations.

F.2.b. Construction Observations and Testing

We recommend retaining us to perform the required observations and testing during construction as part of the ongoing geotechnical evaluation. This will allow us to correlate the subsurface conditions exposed during construction with those encountered by the borings and provide professional continuity from the design phase to the construction phase. If we do not perform observations and testing during construction, it becomes the responsibility of others to validate the assumption made during the preparation of this report and to accept the construction-related geotechnical engineer-of-record responsibilities.

F.3. Use of Report

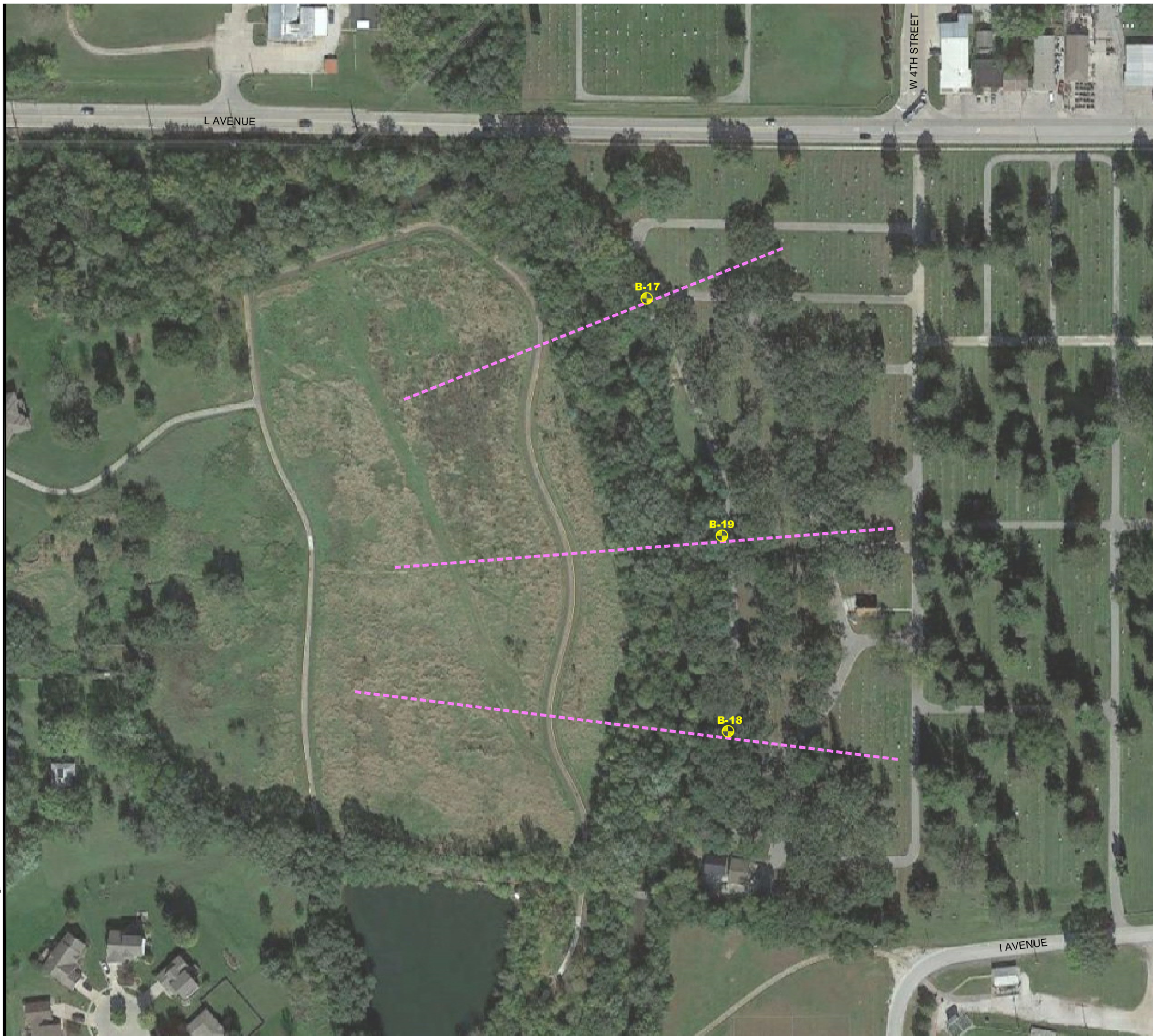
This report is for the exclusive use of the addressed parties. Without written approval, we assume no responsibility to other parties regarding this report. Our evaluation, analyses and recommendations may not be appropriate for other parties or projects.

F.4. Standard of Care

In performing its services, Braun Intertec used that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession currently practicing in the same locality. No warranty, express or implied, is made.

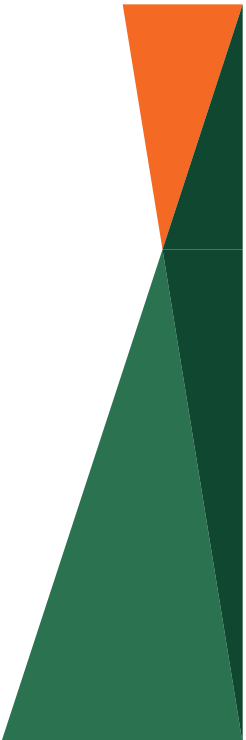
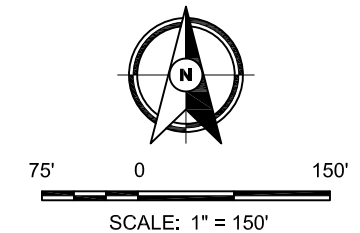
Appendix

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 **DENOTES APPROXIMATE LOCATION OF STANDARD PENETRATION TEST BORING**

 **CROSS SECTION OVERVIEW**



Drawing Information

Project No:	B2102398
Drawing No:	B2102398
Drawn By:	BJB
Date Drawn:	5/17/21
Checked By:	BG
Last Modified:	5/19/21

Project Information

Nevada Wetlands
West Indian Creek East Bank
I Avenue and 1st Street
Nevada, Iowa

**Soil Boring
Location Sketch**

See Descriptive Terminology sheet for explanation of abbreviations

Project Number B2102398					BORING: B-17		
Geotechnical Evaluation					LOCATION: See attached sketch		
Nevada Wetlands					LATITUDE:		
Nevada, Iowa					LONGITUDE:		
DRILLER: MT/JV		LOGGED BY: H.Olson		START DATE: 04/22/21		END DATE: 04/22/21	
SURFACE ELEVATION: 972.0 ft		RIG: 7507		METHOD: 3 1/4" HSA		SURFACING: Wooded WEATHER: Sunny	
Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q _p tsf	MC %	Tests or Remarks
970.1		TOPSOIL					
1.9		LEAN CLAY with SAND (CL), brown, moist, soft to medium (LOESS)		2-2-2 (4) 8"			
966.0			5	2-2-2 (4) 13"			
6.0		SANDY LEAN CLAY (CL), trace Gravel, brown, moist, stiff (GLACIAL TILL)		TW 24"		13	LL=39, PL=16, PI=23 P200=57% DD=123 pcf
			10	2-5-6 (11) 18"			
955.0			15	2-5-6 (11) 18"			
17.0		LEAN CLAY with SAND (CL), trace Gravel, gray, moist, stiff (GLACIAL TILL)		TW 24"		14	LL=32, PL=13, PI=19 DD=119 pcf
			20				
			25	3-6-9 (15) 18"			
			30	2-4-6 (10) 18"			

Continued on next page

See Descriptive Terminology sheet for explanation of abbreviations

Project Number B2102398					BORING: B-17		
Geotechnical Evaluation					LOCATION: See attached sketch		
Nevada Wetlands					LATITUDE:		LONGITUDE:
Nevada, Iowa					START DATE: 04/22/21		END DATE: 04/22/21
DRILLER: MT/JV		LOGGED BY: H.Olson		SURFACING: Wooded		WEATHER: Sunny	
SURFACE ELEVATION: 972.0 ft		RIG: 7507		METHOD: 3 1/4" HSA			
Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q _p tsf	MC %	Tests or Remarks
931.0		LEAN CLAY with SAND (CL), trace Gravel, gray, moist, stiff (GLACIAL TILL)				15	
41.0		END OF BORING Boring immediately backfilled		TW 24"			
				3-5-6 (11) 18"			

See Descriptive Terminology sheet for explanation of abbreviations

Project Number B2102398				BORING: B-18	
Geotechnical Evaluation				LOCATION: See attached sketch	
Nevada Wetlands				LATITUDE:	
Nevada, Iowa				LONGITUDE:	
DRILLER: MT/JV	LOGGED BY: H.Olson	START DATE: 04/22/21	END DATE: 04/22/21		
SURFACE ELEVATION: 972.0 ft	RIG: 7507	METHOD: 3 1/4" HSA	SURFACING: Wooded	WEATHER: Sunny	

Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q _p tsf	MC %	Tests or Remarks
971.0		TOPSOIL					
1.0		LEAN CLAY with SAND (CL), brown, moist, medium (LOESS)		1-2-3 (5) 18"			
			5	2-3-3 (6) 18"			
966.0		SANDY LEAN CLAY (CL), trace Gravel, brown, moist, very stiff (GLACIAL TILL)		TW 24"		15	LL=23, PL=13, PI=10 DD=117 pcf
6.0			10	8-10-10 (20) 18"			
958.0		LEAN CLAY with SAND (CL), trace Gravel, gray, moist, stiff to very stiff (GLACIAL TILL)		5-8-9 (17) 18"			
14.0			20	4-6-9 (15) 18"			
			25	5-7-8 (15) 18"			
			30	TW 24"		15	DD=119 pcf

Continued on next page

See Descriptive Terminology sheet for explanation of abbreviations

Project Number B2102398 Geotechnical Evaluation Nevada Wetlands Nevada, Iowa					BORING: B-18		
					LOCATION: See attached sketch		
					LATITUDE:	LONGITUDE:	
DRILLER: MT/JV	LOGGED BY: H.Olson		START DATE: 04/22/21	END DATE: 04/22/21			
SURFACE ELEVATION: 972.0 ft	RIG: 7507	METHOD: 3 1/4" HSA	SURFACING: Wooded	WEATHER: Sunny			
Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q _p tsf	MC %	Tests or Remarks
		LEAN CLAY with SAND (CL), trace Gravel, gray, moist, stiff to very stiff (GLACIAL TILL)					
			35	2-4-7 (11) 11"			
			40	2-4-7 (11) 11"			
931.0 41.0		END OF BORING Boring immediately backfilled					
			45				
			50				
			55				
			60				

Project Number B2102398					BORING: B-19			
Geotechnical Evaluation					LOCATION: See attached sketch			
Nevada Wetlands					LATITUDE:		LONGITUDE:	
Nevada, Iowa					START DATE: 04/22/21		END DATE: 04/22/21	
DRILLER: MT/JV	LOGGED BY: H.Olson		SURFACE ELEVATION: 976.0 ft		RIG: 7507	METHOD: 3 1/4" HSA	SURFACING: Wooded	WEATHER: Sunny
Elev./Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q _p tsf	MC %	Tests or Remarks	
974.1		TOPSOIL						
1.9		SANDY LEAN CLAY (CL), trace Gravel, brown, moist, medium to very stiff (GLACIAL TILL)		2-2-3 (5) 18"				
			5	2-4-5 (9) 18"				
				TW 24"		12	DD=125 pcf	
			10	6-9-10 (19) 18"				
962.0		LEAN CLAY with SAND (CL), trace Gravel, gray, moist to wet, stiff to very stiff (GLACIAL TILL)		4-7-7 (14) 18"				
14.0				TW 24"		23	DD=102 pcf q _u =1.7 tsf	
			25	2-4-6 (10) 18"				
			30	5-8-11 (19) 18"				

Continued on next page

See Descriptive Terminology sheet for explanation of abbreviations

Project Number B2102398 Geotechnical Evaluation Nevada Wetlands Nevada, Iowa					BORING: B-19		
					LOCATION: See attached sketch		
					LATITUDE:	LONGITUDE:	
DRILLER: MT/JV	LOGGED BY: H.Olson	START DATE: 04/22/21	END DATE: 04/22/21				
SURFACE ELEVATION: 976.0 ft	RIG: 7507	METHOD: 3 1/4" HSA	SURFACING: Wooded	WEATHER: Sunny			
Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q _p tsf	MC %	Tests or Remarks
		LEAN CLAY with SAND (CL), trace Gravel, gray, moist to wet, stiff to very stiff (GLACIAL TILL)					
			35	4-7-16 (23) 18"			
935.0			40	3-5-8 (13) 18"			Temporary piezometer installed at 40 feet and then removed. Water level at 36 feet after piezometer removed. Water observed at 35.0 feet while drilling. Water observed at 37.0 feet at end of drilling.
41.0		END OF BORING Boring immediately backfilled					
			45				
			50				
			55				
			60				

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests ^A				Soil Classification		
				Group Symbol	Group Name ^B	
Coarse-grained Soils (more than 50% retained on No. 200 sieve)	Gravels (More than 50% of coarse fraction retained on No. 4 sieve)	Clean Gravels (Less than 5% fines ^C)	$C_u \geq 4$ and $1 \leq C_c \leq 3^D$	GW	Well-graded gravel ^E	
			$C_u < 4$ and/or ($C_c < 1$ or $C_c > 3$) ^D	GP	Poorly graded gravel ^E	
		Gravels with Fines (More than 12% fines ^C)	Fines classify as ML or MH	GM	Silty gravel ^{EFG}	
			Fines Classify as CL or CH	GC	Clayey gravel ^{EFG}	
	Sands (50% or more coarse fraction passes No. 4 sieve)	Clean Sands (Less than 5% fines ^H)	$C_u \geq 6$ and $1 \leq C_c \leq 3^D$	SW	Well-graded sand ^I	
			$C_u < 6$ and/or ($C_c < 1$ or $C_c > 3$) ^D	SP	Poorly graded sand ^I	
		Sands with Fines (More than 12% fines ^H)	Fines classify as ML or MH	SM	Silty sand ^{FGI}	
			Fines classify as CL or CH	SC	Clayey sand ^{FGI}	
Fine-grained Soils (50% or more passes the No. 200 sieve)	Silts and Clays (Liquid limit less than 50)	Inorganic	PI > 7 and plots on or above "A" line ^J	CL	Lean clay ^{KLM}	
			PI < 4 or plots below "A" line ^J	ML	Silt ^{KLM}	
		Organic	Liquid Limit – oven dried	Liquid Limit – not dried < 0.75	OL	Organic clay ^{KLMN}
			Liquid Limit – oven dried		OH	Organic silt ^{KLMQ}
	Silts and Clays (Liquid limit 50 or more)	Inorganic	PI plots on or above "A" line	CH	Fat clay ^{KLM}	
			PI plots below "A" line	MH	Elastic silt ^{KLM}	
		Organic	Liquid Limit – oven dried	Liquid Limit – not dried < 0.75	OH	Organic clay ^{KLMQ}
			Liquid Limit – oven dried		OH	Organic silt ^{KLMQ}
Highly Organic Soils	Primarily organic matter, dark in color, and organic odor			PT	Peat	

Particle Size Identification

- Boulders..... over 12"
- Cobbles..... 3" to 12"
- Gravel
 - Coarse..... 3/4" to 3" (19.00 mm to 75.00 mm)
 - Fine..... No. 4 to 3/4" (4.75 mm to 19.00 mm)
- Sand
 - Coarse..... No. 10 to No. 4 (2.00 mm to 4.75 mm)
 - Medium..... No. 40 to No. 10 (0.425 mm to 2.00 mm)
 - Fine..... No. 200 to No. 40 (0.075 mm to 0.425 mm)
- Silt..... No. 200 (0.075 mm) to .005 mm
- Clay..... < .005 mm

Relative Proportions^{L-M}

- trace..... 0 to 5%
- little..... 6 to 14%
- with..... ≥ 15%

Inclusion Thicknesses

- lens..... 0 to 1/8"
- seam..... 1/8" to 1"
- layer..... over 1"

Apparent Relative Density of Cohesionless Soils

- Very loose 0 to 4 BPF
- Loose 5 to 10 BPF
- Medium dense..... 11 to 30 BPF
- Dense..... 31 to 50 BPF
- Very dense..... over 50 BPF

Consistency of Cohesive Soils **Blows Per Foot** **Approximate Unconfined Compressive Strength**

- Very soft..... 0 to 1 BPF..... < 0.25 tsf
- Soft..... 2 to 4 BPF..... 0.25 to 0.5 tsf
- Medium..... 5 to 8 BPF..... 0.5 to 1 tsf
- Stiff..... 9 to 15 BPF..... 1 to 2 tsf
- Very Stiff..... 16 to 30 BPF..... 2 to 4 tsf
- Hard..... over 30 BPF..... > 4 tsf

Moisture Content:

- Dry:** Absence of moisture, dusty, dry to the touch.
- Moist:** Damp but no visible water.
- Wet:** Visible free water, usually soil is below water table.

Drilling Notes:

Blows/N-value: Blows indicate the driving resistance recorded for each 6-inch interval. The reported N-value is the blows per foot recorded by summing the second and third interval in accordance with the Standard Penetration Test, ASTM D1586.

Partial Penetration: If the sampler could not be driven through a full 6-inch interval, the number of blows for that partial penetration is shown as #/x" (i.e. 50/2"). The N-value is reported as "REF" indicating refusal.

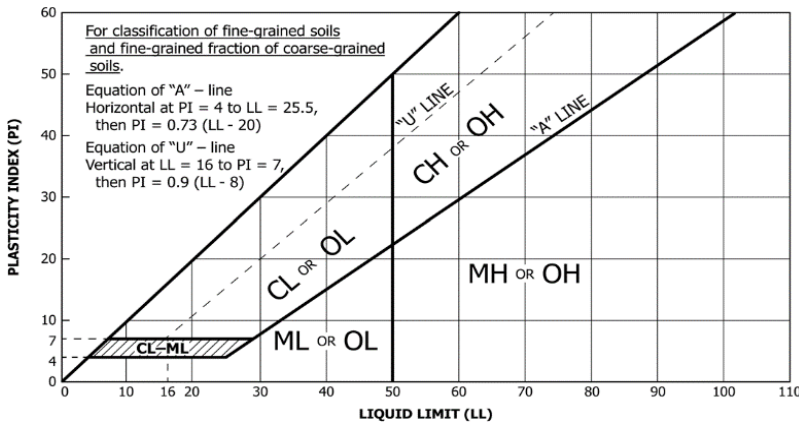
Recovery: Indicates the inches of sample recovered from the sampled interval. For a standard penetration test, full recovery is 18", and is 24" for a thinwall/shelby tube sample.

WOH: Indicates the sampler penetrated soil under weight of hammer and rods alone; driving not required.

WOR: Indicates the sampler penetrated soil under weight of rods alone; hammer weight and driving not required.

Water Level: Indicates the water level measured by the drillers either while drilling (◊), at the end of drilling (▼), or at some time after drilling (◊).

- A. Based on the material passing the 3-inch (75-mm) sieve.
- B. If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.
- C. Gravels with 5 to 12% fines require dual symbols:
 - GW-GM well-graded gravel with silt
 - GW-GC well-graded gravel with clay
 - GP-GM poorly graded gravel with silt
 - GP-GC poorly graded gravel with clay
- D. $C_u = D_{60} / D_{10}$ $C_c = (D_{30})^2 / (D_{10} \times D_{60})$
- E. If soil contains ≥ 15% sand, add "with sand" to group name.
- F. If fines classify as CL-ML, use dual symbol GC-GM or SC-SM.
- G. If fines are organic, add "with organic fines" to group name.
- H. Sands with 5 to 12% fines require dual symbols:
 - SW-SM well-graded sand with silt
 - SW-SC well-graded sand with clay
 - SP-SM poorly graded sand with silt
 - SP-SC poorly graded sand with clay
- I. If soil contains ≥ 15% gravel, add "with gravel" to group name.
- J. If Atterberg limits plot in hatched area, soil is CL-ML, silty clay.
- K. If soil contains 15 to < 30% plus No. 200, add "with sand" or "with gravel", whichever is predominant.
- L. If soil contains ≥ 30% plus No. 200, predominantly sand, add "sandy" to group name.
- M. If soil contains ≥ 30% plus No. 200 predominantly gravel, add "gravelly" to group name.
- N. PI ≥ 4 and plots on or above "A" line.
- O. PI < 4 or plots below "A" line.
- P. PI plots on or above "A" line.
- Q. PI plots below "A" line.

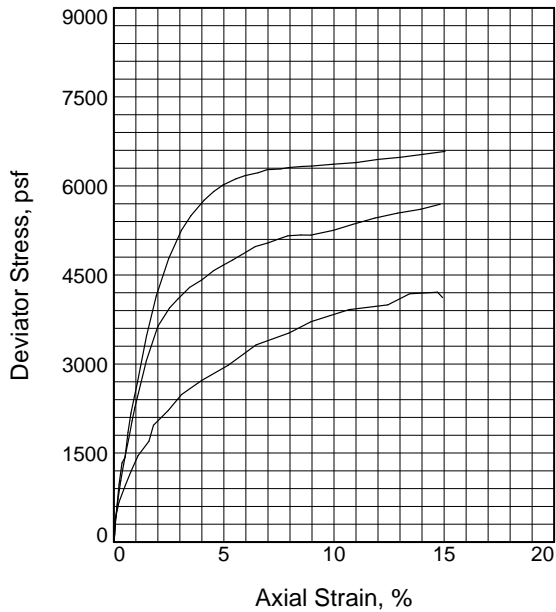
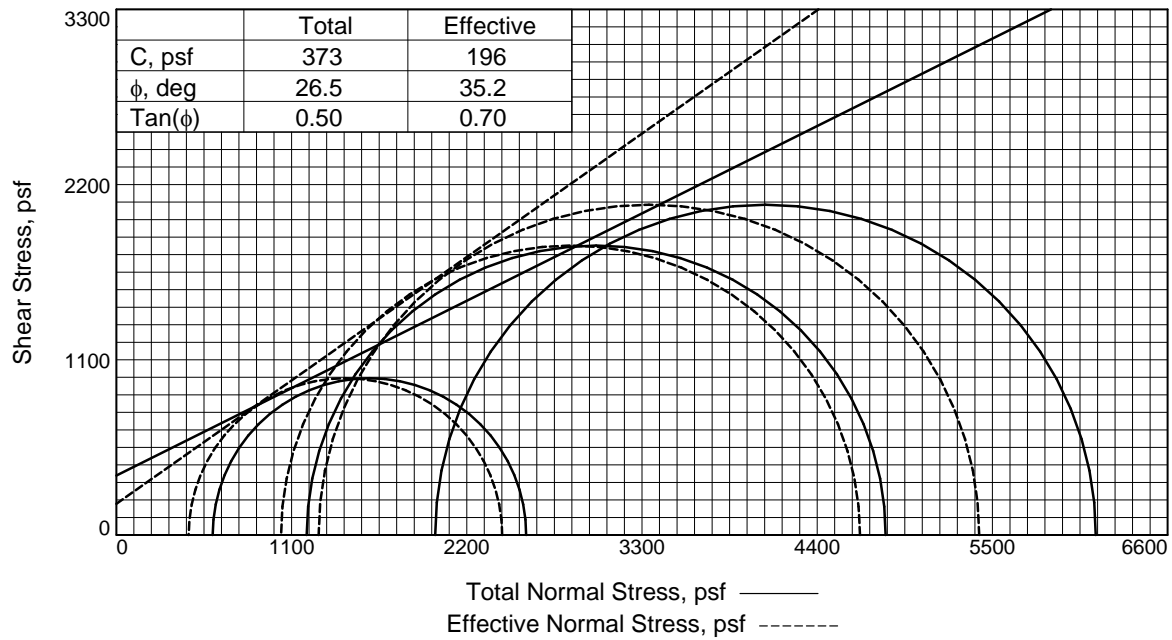


Laboratory Tests

- DD Dry density, pcf
- WD Wet density, pcf
- P200 % Passing #200 sieve
- MC Moisture content, %
- OC Organic content, %
- q_p Pocket penetrometer strength, tsf
- q_u Unconfined compression test, tsf
- LL Liquid limit
- PL Plastic limit
- PI Plasticity index

Sample Symbols

- Standard Penetration Test
- Modified California (MC)
- Auger
- Grab Sample
- Rock Core
- Thinwall (TW)/Shelby Tube (SH)
- Texas Cone Penetrometer
- Dynamic Cone Penetrometer



Sample No.	1	2	3	
Initial	Water Content, %	14.2	14.0	14.1
	Dry Density, pcf	119.2	120.9	119.6
	Saturation, %	92.3	95.8	93.4
	Void Ratio	0.4144	0.3946	0.4088
	Diameter, in.	1.402	1.387	1.417
	Height, in.	2.902	2.902	2.884
At Test	Water Content, %	16.0	15.0	15.3
	Dry Density, pcf	118.8	121.2	120.5
	Saturation, %	102.9	103.5	103.8
	Void Ratio	0.4193	0.3906	0.3988
	Diameter, in.	1.403	1.385	1.414
	Height, in.	2.906	2.901	2.876
Strain rate, %/min.	0.0071	0.0071	0.0071	
Back Pressure, psf	5515	5486	5443	
Cell Pressure, psf	6120	6682	7445	
Fail. Stress, psf	1968	3635	4147	
Excess Pore Pr., psf	151	161	732	
Ult. Stress, psf				
Excess Pore Pr., psf				
$\bar{\sigma}_1$ Failure, psf	2422	4669	5417	
$\bar{\sigma}_3$ Failure, psf	454	1034	1270	

Type of Test:

CU with Pore Pressures

Sample Type: Thinwall

Description: LEAN CLAY with sand(CL), trace gravel, dark brown and brown

LL= 32 PL= 13 PI= 19

Assumed Specific Gravity= 2.7

Remarks: Failure criteria based on the deviator stress at maximum obliquity ratio.

Figure _____

Client: HR Green Inc.

Project: Nevada Wetlands Proposal
Nevada, Iowa

Location: B-17

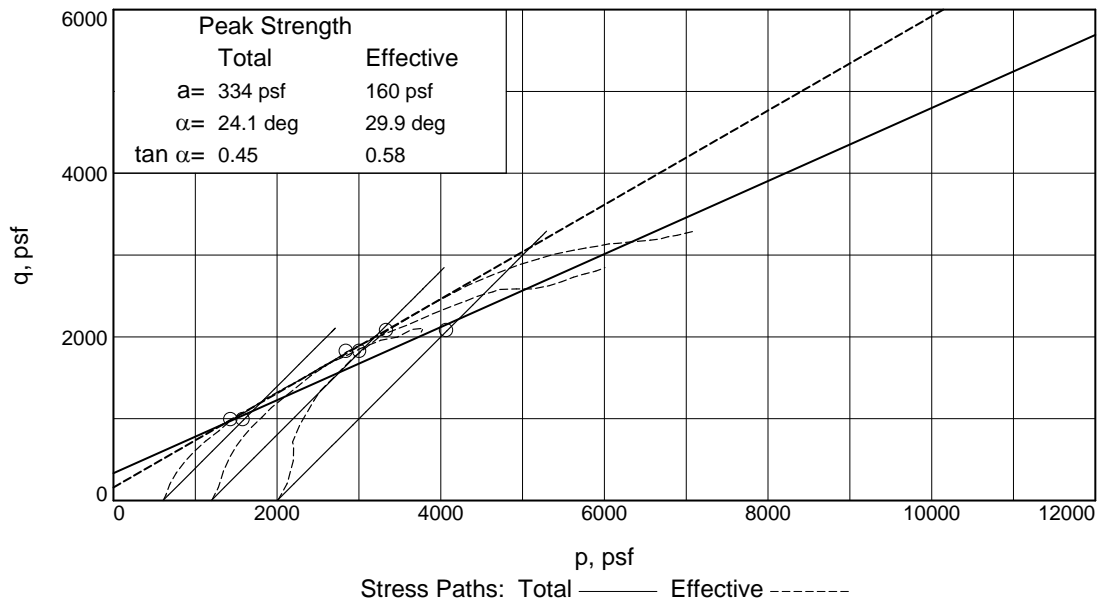
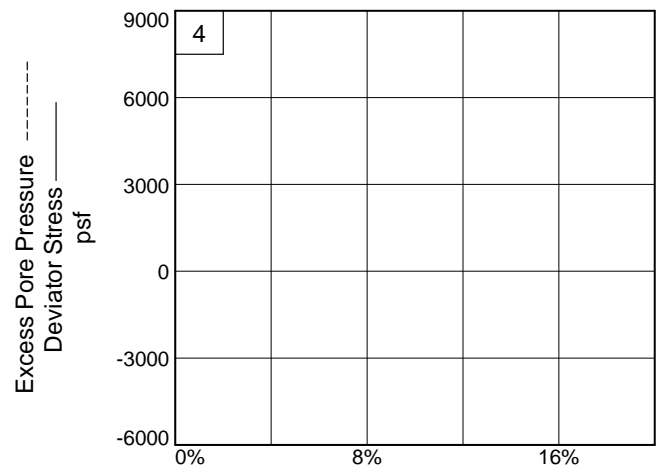
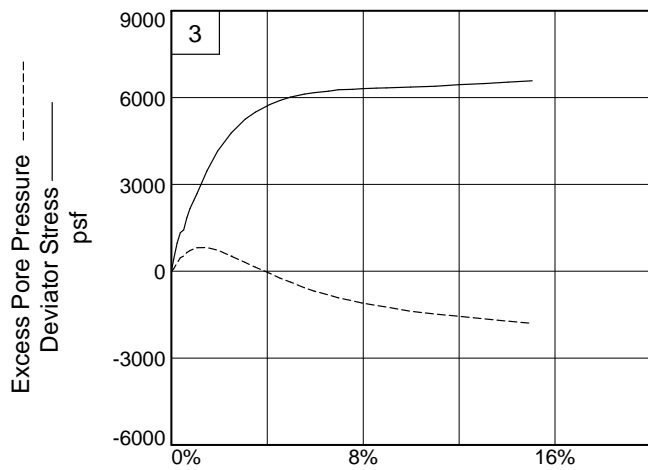
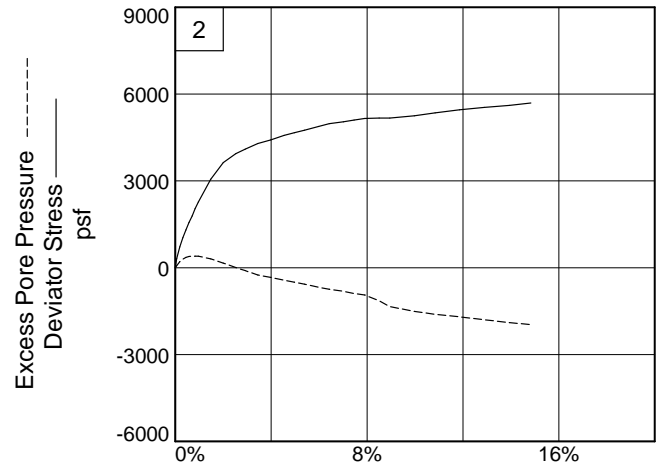
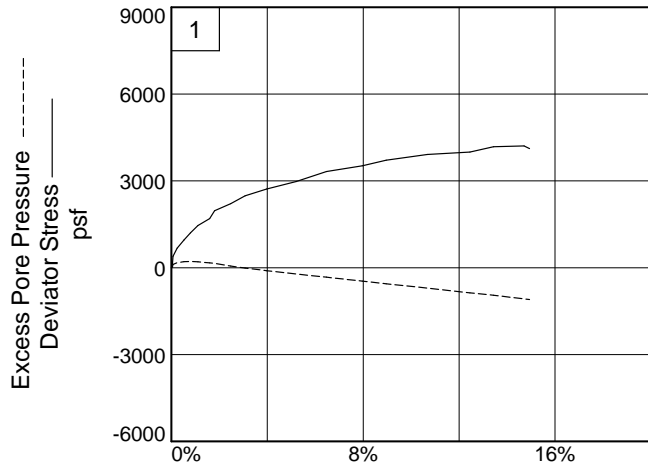
Depth: 19.5-21.5 feet

Proj. No.: B2102398

Date Sampled:

TRIAXIAL SHEAR TEST REPORT
 Braun Intertec Corporation
 Lenexa, Kansas

Tested By: ST _____



Client: HR Green Inc.

Project: Nevada Wetlands Proposal

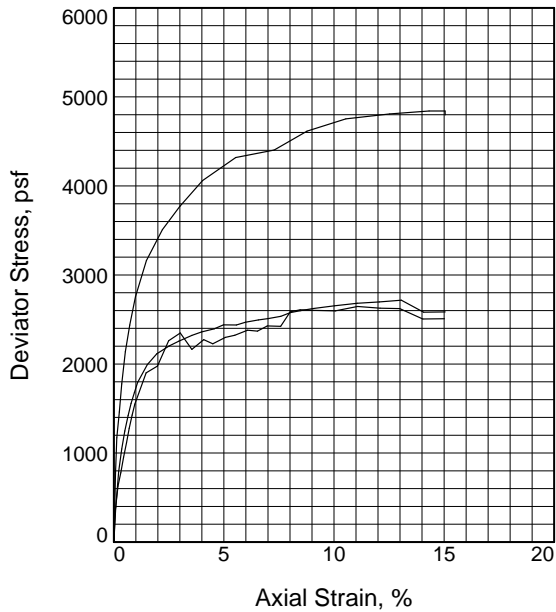
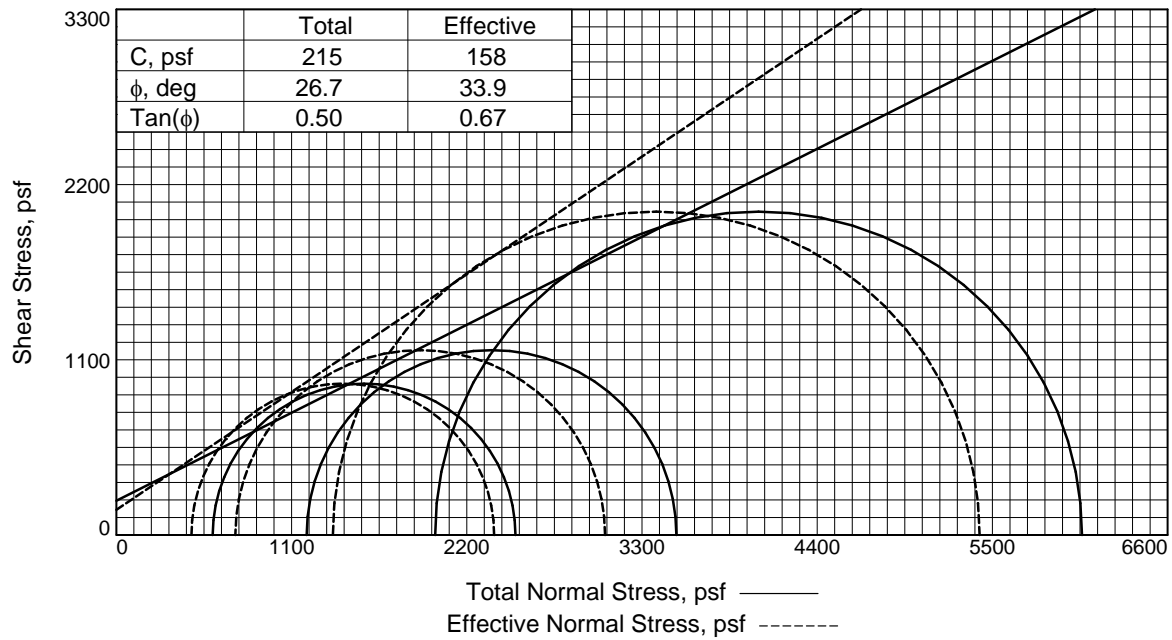
Location: B-17 **Depth:** 19.5-21.5 feet

Project No.: B2102398

Figure _____

Braun Intertec Corporation

Tested By: ST _____



Sample No.	1	2	3	
Initial	Water Content, %	15.6	14.8	15.8
	Dry Density, pcf	116.5	116.5	117.8
	Saturation, %	94.3	89.5	99.3
	Void Ratio	0.4466	0.4466	0.4305
	Diameter, in.	1.401	1.385	1.385
	Height, in.	2.873	2.885	2.889
At Test	Water Content, %	16.7	16.3	14.7
	Dry Density, pcf	116.8	118.1	120.3
	Saturation, %	101.6	102.9	99.0
	Void Ratio	0.4437	0.4274	0.4015
	Diameter, in.	1.400	1.378	1.374
	Height, in.	2.871	2.876	2.876
Strain rate, %/min.	0.0071	0.0072	0.0072	
Back Pressure, psf	5429	5357	5348	
Cell Pressure, psf	6034	6552	7350	
Fail. Stress, psf	1901	2321	4061	
Excess Pore Pr., psf	133	448	643	
Ult. Stress, psf				
Excess Pore Pr., psf				
$\bar{\sigma}_1$ Failure, psf	2372	3068	5420	
$\bar{\sigma}_3$ Failure, psf	471	747	1359	

Type of Test:

CU with Pore Pressures

Sample Type: Thinwall

Description: SANDY LEAN CLAY, trace gravel, brown and gray

LL= 23 PL= 13 PI= 10

Assumed Specific Gravity= 2.7

Remarks: Failure criteria based on the deviator stress at the maximum obliquity ratio.

Figure _____

Client: HR Green Inc.

Project: Nevada Wetlands Proposal
Nevada, Iowa

Location: B-18

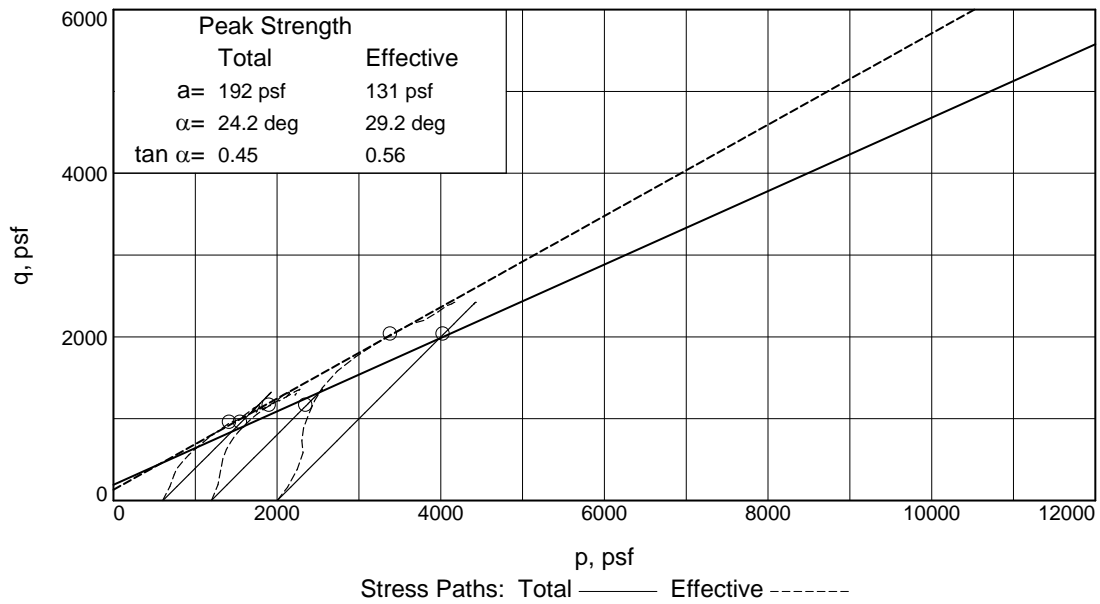
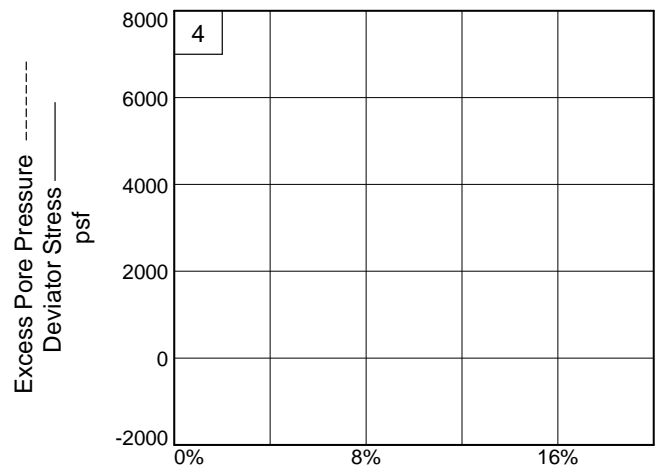
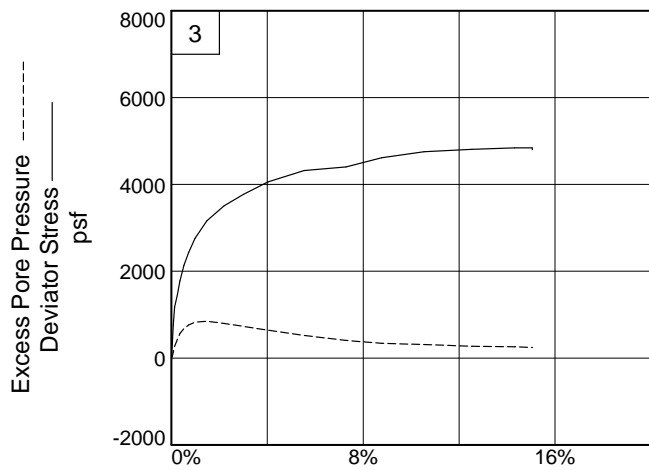
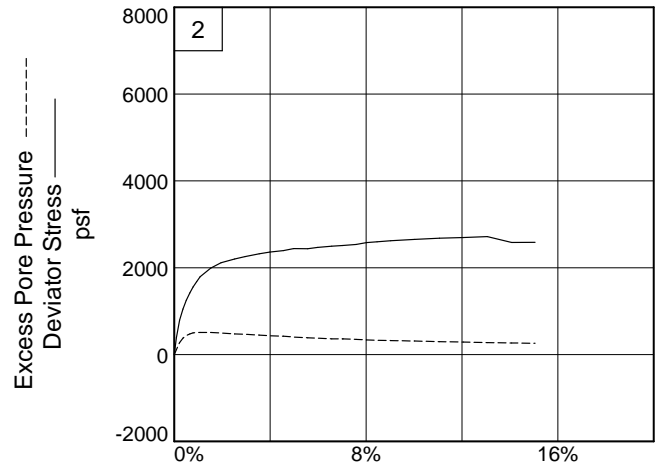
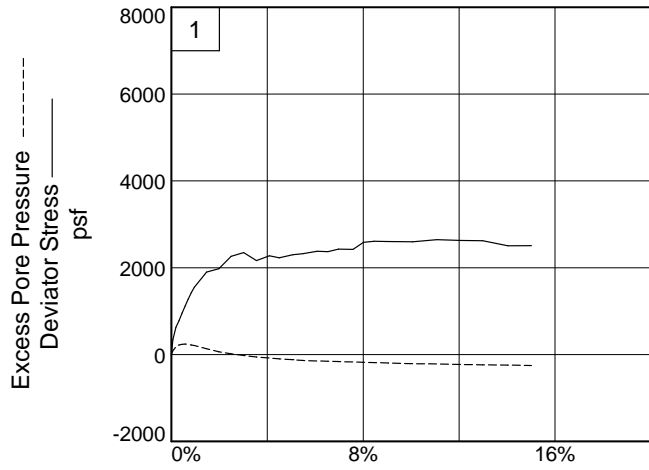
Depth: 7-9 feet

Proj. No.: B2102398

Date Sampled:

TRIAXIAL SHEAR TEST REPORT
 Braun Intertec Corporation
 Lenexa, Kansas

Tested By: ST



Client: HR Green Inc.

Project: Nevada Wetlands Proposal

Location: B-18 **Depth:** 7-9 feet

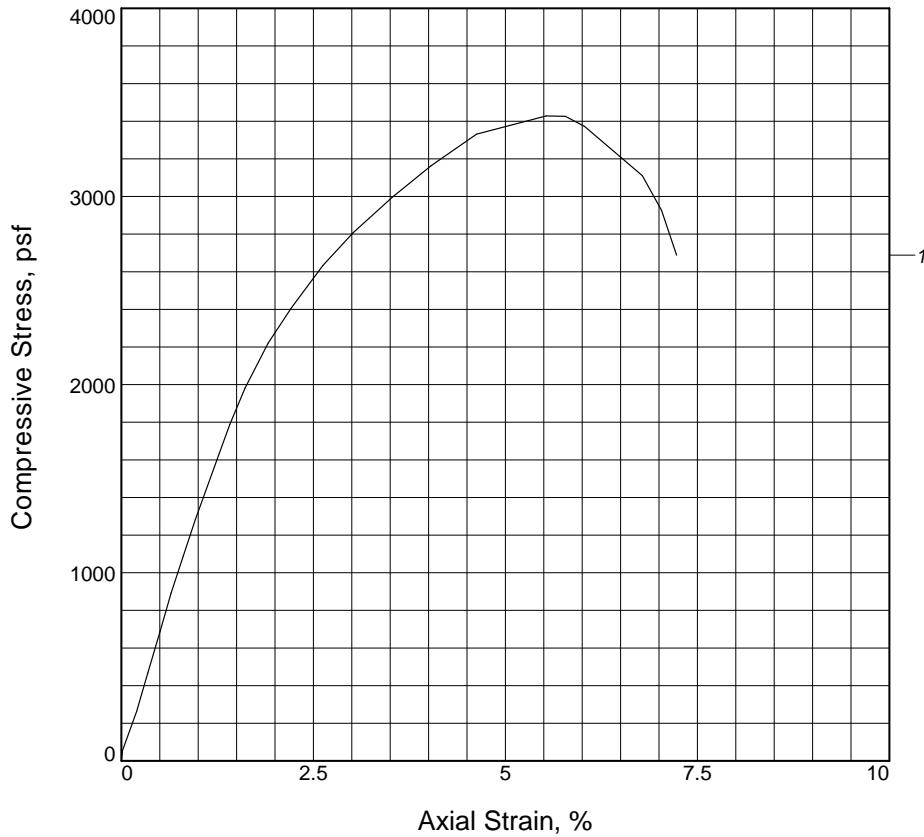
Project No.: B2102398

Figure _____

Braun Intertec Corporation

Tested By: ST _____

UNCONFINED COMPRESSION TEST



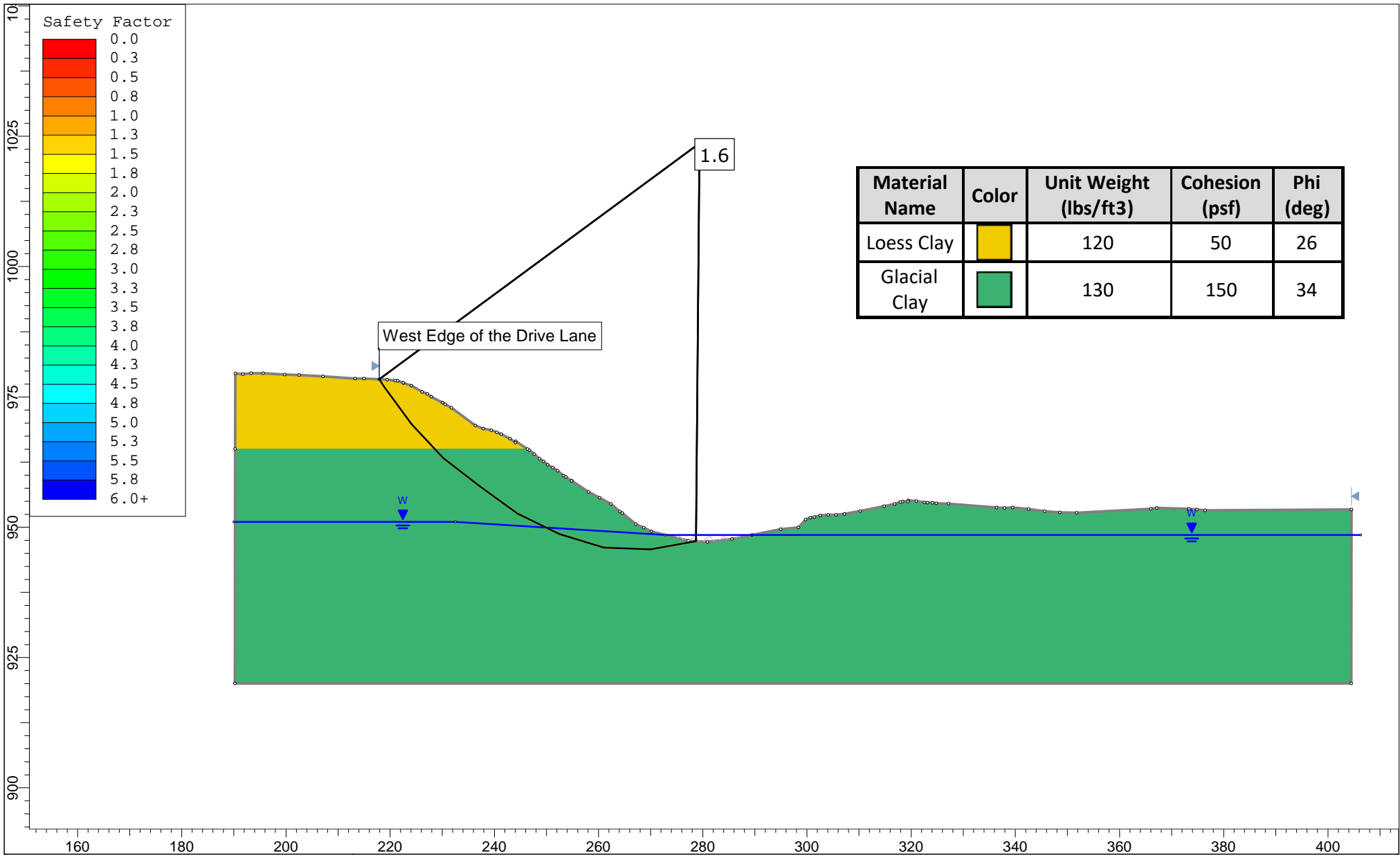
Sample No.	1		
Unconfined strength, psf	3428		
Undrained shear strength, psf	1714		
Failure strain, %	5.5		
Strain rate, %/min.	1.50		
Water content, %	23.4		
Wet density, pcf	126.4		
Dry density, pcf	102.4		
Saturation, %	97.9		
Void ratio	0.6467		
Specimen diameter, in.	2.860		
Specimen height, in.	5.783		
Height/diameter ratio	2.02		

Description: Lean Clay with sand lenses, dark gray

LL =	PL =	PI =	Assumed GS= 2.7	Type: Thinwall
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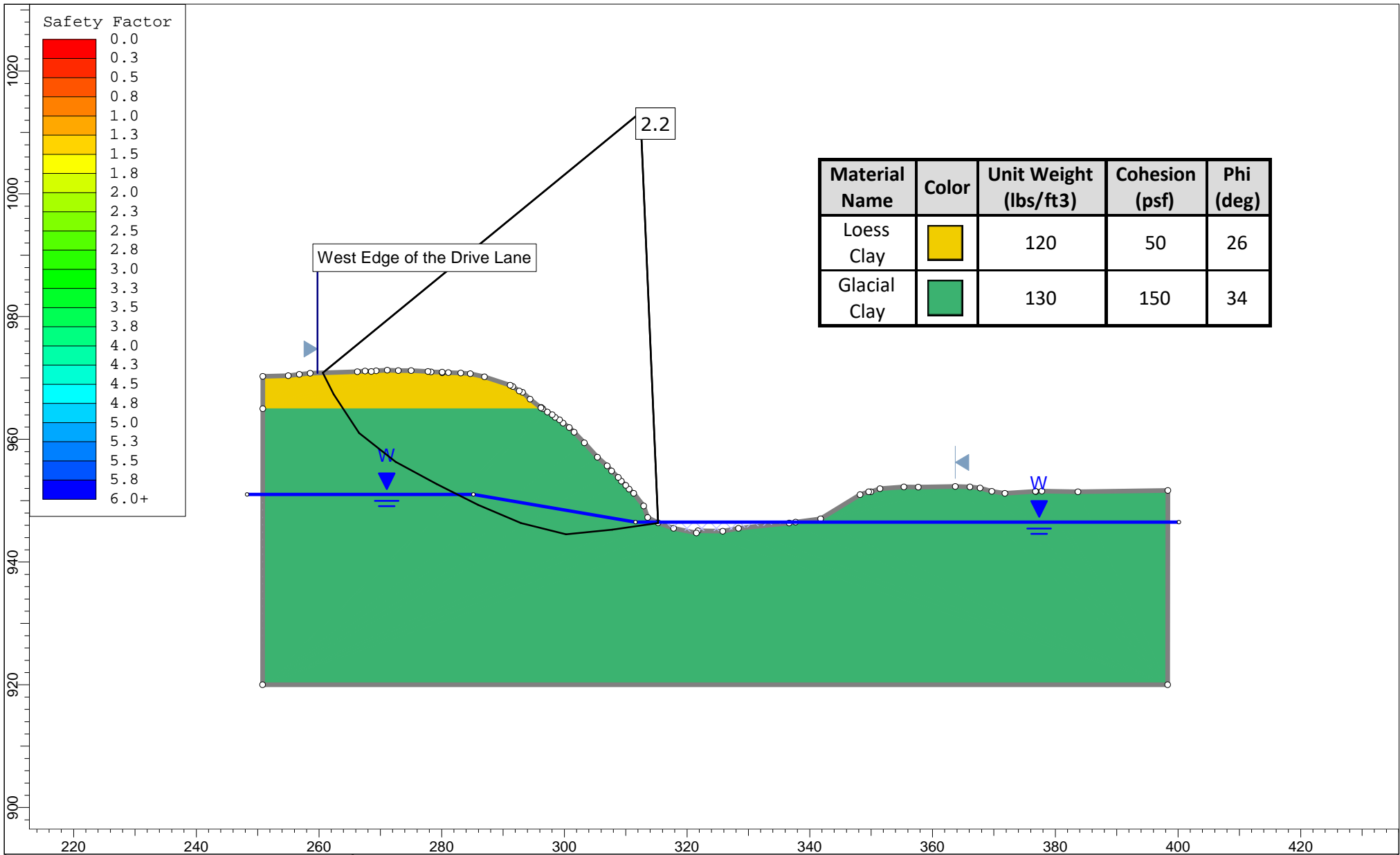
<p>Project No.: B2102398</p> <p>Date Sampled:</p> <p>Remarks:</p> <p>Figure _____</p>	<p>Client: HR Green Inc.</p> <p>Project: Nevada Wetlands Proposal Nevada, Iowa</p> <p>Location: B-19</p> <p>Depth: 19.5-21.5 feet</p> <p style="text-align: center;">UNCONFINED COMPRESSION TEST Braun Intertec Corporation Lenexa, Kansas</p>
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Tested By: ST _____

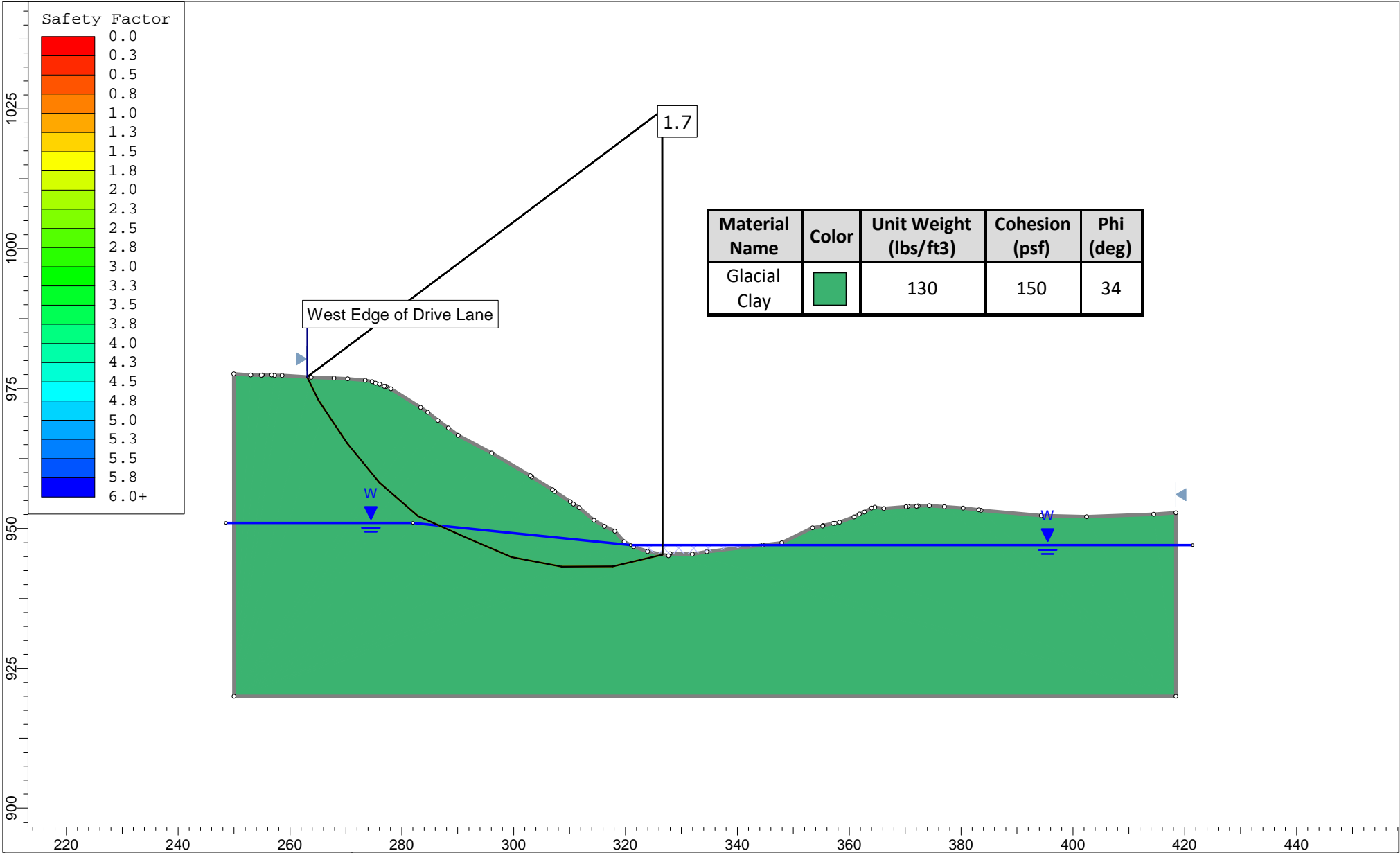


SLIDE INTERPRETATION 22
The Science You Build On.

Project		West Indian Creek East Bank	
Analysis	sta 68605	Scale	1:306
Drawn By	BSG	Company	Braun Intertec
Date	5/17/2021	File Name	B-17 68605 baseflow.slim



Project		West Indian Creek East Bank	
Analysis	sta 67961	Scale	1:260
Drawn By	BSG	Company	Braun Intertec
Date	5/17/2021	File Name	B-18 67961 baseflow.slim



Project		West Indian Creek East Bank	
Analysis	sta 68243	Scale	1:285
Drawn By	BSG	Company	Braun Intertec
Date	5/19/2021	File Name	B-19 68243 baseflow.slim